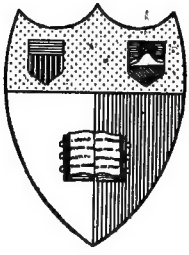
THE SPORTSMAN IN SOUTH AFRICA.



THE

SPORTSMAN IN SOUTH AFRICA.

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THE HAUNTS, HABITS, DESCRIPTION,
AND THE PURSUIT OF ALL GAME, BOTH FUR AND FEATHER,
FOUND SOUTH OF THE ZAMBESI (INCLUDING THE
CAPE COLONY, TRANSVAAL, BECHUANALAND, NATAL, AND
DAMARALAND), AT THE PRESENT DAY, WITH BRIEF
NOTICES OF THE BEST KNOWN FRESH AND
SALT-WATER FISH.

BY
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AND
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PREFACE.

IT is always difficult for an author who claims no literary merit for his work, and who is fully aware of his imperfections in this respect, to find a just excuse for venturing into print; and if it were not for the hope that the information gathered during ten years of close observation in South Africa and its Interior, however crudely it may be laid before our readers, will prove of real assistance, not only to the Sportsman in pursuit of game, but also to the less advanced Students of the Natural History of that country, we should never have undertaken the task which is set forth in the following pages. An additional reason for intruding the result of our experiences upon the attention of the public is the surprise which has always been evinced by those who take an interest in the rich sport which may still be had in the tropical portion of the Continent herein treated of, that no attempt has hitherto been made to bring within the compass of a compact and portable volume complete particulars of the game ranging over the districts to which we have referred.

Care has been taken to avoid the scientific vocabulary employed in all technical works treating of similar subjects, and in this respect it is hoped that the descriptions of the different animals, birds, and fish will be sufficiently accurate and plainly defined to enable the ordinary reader to recognise without difficulty the varieties as they are referred to.

We have also endeavoured to set forth in a simple and practical way (avoiding unnecessary prolixity by a narration of actual experiences) the methods adopted in the discovery and the pursuit of every description of animal indigenous to that portion of Africa South of the Zambesi which is likely to show sport, including (not, it must be confessed, without considerable difficulty) particulars of the whole of the Game Birds found in that part of the Continent, together with some of its Fresh-water and Sea Fish, as well as a complete list of all known species and varieties of Antelopes, coupled with pic-

torial representations of their appearance, their proper names, and the districts in which they are to be found. So far as we have been able to do so, the Colonial, Boer, and Native terms for most of the subjects referred to in the volume are also given.

We therefore beg leave to hope that the present work will be of value to the Sportsman, as it may, in some instances, be acceptable to the literature of Zoology.

Our thanks are specially due to Dr. P. L. Sclater, F.R.S., Secretary of the Zoological Society, for the interest he has taken in the work, and for assistance rendered, as also to Dr. A. Günther, F.R.S., Mr. Oldfield Thomas, F.Z.S., and Dr. R. Bowdler Sharpe, M.A., F.L.S., of the Natural History Section of the British Museum; and we should be ungrateful were we not to acknowledge the services of Miss Hilda Robinson, whose faithful delineation of the whole of the antelopes and most of the game birds, will, we trust, be appreciated by our readers themselves. We are indebted for portraits of some of the Francolins and Wild Duck to Sir A. Smith's "Zoology of South Africa."

THE AUTHORS.

LONDON:
September, *1892*.

CONTENTS.

ILLUSTRATIONS.

Frontispiece.

Fig. 39.—The Black-bellied Khoorhan (*O. melanogaster*).

Fig. 38.—The White-quilled Khoorhan (*Otis afroides*).

Fig. 40.—The Blue Khoorhan (*O. cærulescens*).

Fig. 41.—The Stanley Bustard (*O. caffra*).

Fig. 42.—The Noisy Francolin (*Francolinus clamator*).

Fig. 43.—The Cape Red-necked Francolin (*Pternistes nudicollis*).

Fig. 44.—The Bush Khoorhan (*O. ruficrista*).

Fig. 46.—The Dikkop (*Œdicnemus capensis*).

Fig. 47.—The Great Snipe (*Gallinago major*).

Fig. 45.—The Vaal Khoorhan (*O. scolopacea*).

THE

SPORTSMAN IN SOUTH AFRICA.

Hints About Equipment, etc.

AS a general rule the average traveller or hunter bound for a trip into the Interior of Africa always leaves England encumbered with a vast amount of unnecessary baggage and "knick-knacks," most of which he is ultimately obliged to leave at some of the frontier towns as he gradually advances Northwards and discovers their utter worthlessness. A practical sportsman wants an outfit suitable for wear and tear and not for show, carrying with him not a single article that he is unable to find a use for, solidity and completeness of equipment being as imperative as lightness of freight. He cannot be too forcibly reminded that the "roads" he will traverse are hardly in keeping with those to which he is accustomed in England, and if his wagon is too heavily loaded with unnecessaries, the more difficulties will he have to contend with, and, in consequence, the less successful will the trip prove.

All ordinary articles of wear, with one or two exceptions, can be obtained almost as cheap in Cape Town, Kimberley, Natal, Mafeking, and other centres, allowance in extra cost, of course, being made for the distance from England. It would, however, be advisable before leaving to be supplied with one good light semi-military saddle, furnished with large D's for the purpose of carrying dead game, and made of the best pig-skin, as well as some strong brown leather riding boots. The "Field" pattern will suit admirably, but care must be taken that those used for walking purposes are well studded with nails. Two or three pairs of well made loose riding breeches, of a material strong enough to withstand the assaults of the numerous varieties of thorns which everywhere flourish so profusely in the Interior, should also be taken. Buckskin, although strong enough for the purpose, is almost unbearable in the hot

weather. For lightness, combined with great strength, nothing has been found to equal the material known as Gabardine, manufactured by Burberry, of Basingstoke. This substance deserves special recommendation, as one suit will generally outlast three or four made of other and perhaps more expensive cloth. The underclothing should be of pure wool, well shrunken, and the sleeping suits made as warm as possible, as the South African winter nights are bitterly cold. A tent is a luxury which, although taking up a great deal of room in a wagon, will be found most convenient when camping in one place for any length of time, while the possession of waterproof sheets is an absolute necessity. Some of these, if first-class articles, and if used with ordinary care, will generally fetch a good price in the country at the termination of a trip.

Without attempting to mention the many varied objects of interest which the ordinary traveller in South Africa is certain to meet with, and the never-ending pleasures obtained by the use of a camera as an effective agent of record, it will be found of the greatest service to the sportsman in affording him a perfect means of rapidly and faithfully depicting strange experiences, sketches of animal life in their natural state, and trophies of the chase as they actually fell, scenes only to be observed in the depth of the wilderness far removed from the haunts of men, and which, although at the moment practically forgotten, may perhaps in after years prove an unfailing source of pleasure in recalling to the imagination the thrilling incidents of a hunter's life. Portability and simplicity of manipulation are very strong recommendations for the use of the kodak, and a succession of views for after development may be obtained from one without any actual photographic knowledge or experience whatever, it generally being a very accommodating instrument indeed in the hands of the raw amateur. Experience, however, has for many reasons proved that it cannot always be relied upon, particularly in a very hot climate; and, unfortunately, even the most perfect instruments are at times, and for the most unaccountable reasons, liable to get out of order. In referring to this one specially, it may be mentioned that up to the moment of development one remains entirely in the dark as to whether matters have been working in a proper groove or not. After a wagon journey of hundreds of miles, and perhaps of many months' careful work with a kodak on the most interesting subjects, it is extremely aggravating to find, on the return to civilisation and when the films are developed, that you

are not the possessor of a single picture, to obtain which you encountered so much difficulty and perhaps danger.

Although far more bulky and cumbersome, ordinary slow glass plates are far preferable to any description of film now in the market, as we have found them to be less affected by the heat. Their use certainly entails a considerable amount of trouble, while the necessary folding dark box for changing the plates takes up a certain amount of wagon room. However, the successful results obtained will go far to outweigh the additional inconvenience, and, speaking from experience, we recommend that the plates should be developed and fixed whenever suitable opportunity presents itself, and safely stowed away in properly constructed receptacles. In this manner, if a mistake be made in exposure on photographing some special object of interest, the subject may again be retaken, and a good printing negative obtained; in fact, you have always got an opportunity of determining the quality of your work as you go along. It is a mistake to believe that, when the word "development" is mentioned, vast supplies of chemicals are necessary adjuncts, as half-a-dozen small bottles of mixed solution of hydrokinone, together with an ounce of bromide of potassium and about three or four pounds of hyposulphate of soda, will develop hundreds of plates. We have used what is called a $6\frac{1}{2}$ by $4\frac{3}{4}$ twin hand camera with double lens, slung by a shoulder band, by which accurate focussing can be conducted without the aid of the provoking and unwieldly tripod, and after months and months banging about in a wagon, the instrument (a brass bound one by Meagher, of Southampton Row) has come out of the ordeal almost as good as new. In the wonderfully clear atmosphere of South Africa, and especially on a cloudless day, the use of an ordinary slow plate with a rapid rectilinear lens, giving an exposure of one second in the open, will generally be found correct.

There are so many eminent manufacturers in the field, and modern firearms have of late attained to such a degree of perfection, that a choice of weapons is a difficult matter. The adoption of "express" bullets in recent years seems to have grown into a certain amount of disrepute, the general complaint being (particularly as regards the larger antelopes) that they are inclined to expand or break up too quickly, without having attained a sufficient degree of penetration; while for this reason the employment of such against the great pachyderms is simply useless. Then,

again, in encounters with thin-skinned and dangerous beasts, such as the Lion or Leopard, solid missiles are to be deprecated except when used in the most skilful hands, as, although the penetration obtained from them may be enormous, where the vital parts have been uninjured the resulting shock to the system is exceedingly small, and instances almost daily occur in which these animals have been found capable of inflicting deadly injuries, although perforated with many solid bullets. The weapon most desired is one capable of discharging either the expanding or solid ball with equal accuracy, and in this connection we mention the names of Gibbs, of Bristol, and Rigby and Sons, of London and Dublin, as the rifles made by these firms have been in constant use, and have given more general satisfaction—at least, in South Africa—than those of any other manufacture. The Farquharson-Metford can be strongly and fairly recommended, not alone on account of its being good enough for every description of game, but because the action is very simple and can easily be cleaned, while the exploded cartridges are not liable to become jammed, which is a very aggravating defect in the sporting Martini. In specially referring to this rifle, our opinion coincides with that of Mr. F. C. Selous, perhaps the greatest living authority on such subjects, and a gentleman who has repeatedly brought down bull Elephants with single bullets fired from a weapon of this pattern.

Unless bent on hunting in the low countries on the East Coast, in some portions of which the large pachyderms are still very numerous, the acquisition of a battery of heavy bore rifles would prove quite a useless appendage. An ordinary plain shot gun, made with strong cylinder barrels, can be obtained from any good manufacturer at a much smaller price, and which will shoot spherical bullets with an equal degree of accuracy and effect as the more expensive articles advertised under different names and as combined shot and ball guns. For feathered game and small antelopes, a plain 12-bore, with the right barrel cylinder (to take ball if necessary) and the left full choke, will be found good enough to all intents and purposes. Before purchasing a Martini sporting rifle, repeated trials should be made as to whether the weapon is capable of properly extracting the exploded Government Boxer pattern cases, as those which are solid-drawn are not so easily obtained in the event of their running short.

Experience has constantly proved that the wood-work attached

to guns is liable to become exceedingly brittle, and breakages of such continually occur in a hot and dry climate. These mishaps, as a rule, invariably take place at inopportune moments, and when far removed from the aid of an expert the smashing of a stock is a most unfortunate and provoking circumstance, the only make-shift at such times being a binding of wet *reim* (raw hide), but it is always a most clumsy one. To prevent a disaster of this nature, the grips of all guns should be plated as far as possible with metal, and although this may increase their weight to a certain extent, this inconvenience will be found to be slight in comparison with the sense of security from breakage afforded by the addition. The fore-sights of all rifles should be made of ivory, white mother-of-pearl, or crocodile teeth, the two latter being preferable to the former, as they are not so liable to become discoloured.

The comfort of an expedition into the Interior depends in a great measure on the acquisition of sound tent wagons, as well as even-pulling oxen to draw them, but it would be invidious to mention any particular maker. To avoid being imposed upon with some highly-painted but useless green wood conveyance, the intending purchaser should unreservedly place himself in the hands of some well-known and respectable firm capable of understanding exactly his requirements, such as Messrs. James Lawrence and Co. and T. J. Poole and Co., both of Kimberley, and Messrs. J. L. Green and Co., of Mafeking, all of whom bear an excellent reputation, and appear to have given general satisfaction in this respect. In addition to the ordinary furniture of a tent wagon, some strong netted pockets or "holdalls" attached to the ribs inside will be found most serviceable, as also a bag made out of a wet ox hide and suspended underneath the bed planks for the purpose of carrying pots, pans, etc., while a cover of the same substance will prevent the canvas of the fore part of the tent from being torn by the thorn-bushes. The spans of oxen to each wagon should contain eighteen thoroughly trained cattle, if possible "salted," *i.e.*, recovered from lung distemper, and averaging from four to seven years of age, but not older.

On making a start, it is quite sufficient to inspan fourteen of the number, the remaining four being driven loose and used when necessary to replace the weary or footsore in the yoke as occasion requires. Good *trek* (draught) oxen ought to be purchased at from £5 to £7 each, but the prices vary very much according to the

supply, but seldom, however, exceed £10. On no account should they be allowed to *trek* during the heat of the day in deep sand when the load is heavy, or where a supply of water cannot absolutely be depended upon, it being preferable to make up lost time by constant progress through the entire night; and where a journey of many months is in contemplation, the wagon should not be loaded with a burden exceeding about 3,500 lbs. in weight.

Only second in importance to the acquisition of a sound wagon and even-pulling spans of oxen, is the necessity of obtaining an efficient and sober driver (who is generally a difficult individual to find amongst, perhaps, the most drunken crew in the world), for no matter how good the cattle may be, a bad and harsh driver will speedily render them almost useless for draught purposes. A good driver will always command his team with his voice, while a bad one will at once be distinguished by the frequent and wholly unnecessary use of the whip. Provided the man so engaged has a good reputation, and can be relied upon, the inexperienced will do well to leave all questions as to distances and places of outspan to him.

For the sake of picking up an occasional mouthful of grass, and also to save the expense of additional "boys'" (native servants) wages, some travellers in South Africa permit their shooting horses to be driven together loose alongside the wagon. Unless where it becomes absolutely necessary to save this expense, the practice should not be allowed, as, owing to the fact that one animal always tries to keep in advance of the others, they become by degrees more difficult to catch and halter, and, from continued kicking and biting, generally manage to develop some latent vice. Where possible, there should be a separate servant told off to lead each couple of horses, and it is only when the wagon has been brought to a standstill that they should all be knee-haltered and allowed out together to graze. Should the supply of mealies (maize) for the morning and evening feed run short, sufficient grass should be cut with a sickle to last the horses when tied up to the wagon during the night. (See Remarks on the Shooting Horse.)

The question as to the proper preservation of the trophies of the chase is far too extensive to allow of more than a passing observation, and it will be sufficient to mention that the prevalent mistake made in skinning the heads of animals is to cut them off too close behind the ears, thereby imposing a serious obstacle against their being properly

mounted by even the most artistic hands; while such work, although of an unpleasant character, should never be placed in the hands of native servants until they have been first thoroughly inducted into what is required by their white masters. Full information on this very important subject to the sportsman can be obtained in that extremely useful handbook, "The Practical Collecting and Preserving of Trophies," by Rowland Ward, F.Z.S.; and as regards the setting up of the same, the reputation of the firm of which that gentleman is the head is so deservedly high as to require no further comment, while the natural and artistic work of Gerrard, of Camden Town, can also be mentioned.

A special danger against which travellers cannot be too strongly warned is the frequent use of spirituous liquors, particularly that villanous compound called Cape brandy, but otherwise known as "Cape smoke," and which invariably proves fatal if taken regularly or in quantities. It possesses the reputation of beating the record of all African fevers and diseases by cutting short the career of many a promising young fellow. Attention should also be called to the inordinate use of purgative medicines, which persons new to the country invariably indulge in, it being necessary to carefully avoid, except in cases of great necessity, all opening medicines; but where such are absolutely required, castor oil is much to be preferred. The habit of taking quinine as a fever preventive has the effect of rendering the drug quite useless when a real attack comes on, and great caution should be exercised when anti-pryrine is resorted to.

Remarks on the South African Game Laws and the Preservation of Game.

ANYONE perusing the very numerous enactments referring to the preservation of the different sorts of game of the Cape Colony itself, might be led to suppose that many species of the larger antelope still remained there, or at least in tolerably fair numbers, and only required special and stringent laws for their safe protection. It is scarcely worth arguing whether these enactments proved inoperative or were framed too late in the day to have a salutary effect. However, we cannot now be blind to the fact—and it is sad for those who take an interest in such an important subject to relate—that, with the exception of a few wild Elephants and perhaps Buffalo, which still eke out a harried existence, although protected in the Colonial Governments' forests, and also an odd troop of Zebras, Koodoos, and probably Hartebeest, which serve as ornaments in a semi-domesticated condition on some of the out-of-the-way farms, the remnant of the noble game which once roamed in countless thousands all over the country, and for which Southern Africa was pre-eminently renowned, has been by wanton and ruthless slaughter decimated or driven far beyond the outermost boundaries of civilisation into the pathless veldt of the Kalahari, or the inhospitable territories of the aborigines of the Interior.

Protected by the difficulty of access to these solitudes, the Giraffe, Eland, and other varieties of the most beautiful and interesting animals in the world, multiplied rapidly and feared no inside foe except the inevitable assaults of wild beasts, the occasional bullet from the passing traveller and trader in search of the necessary supply of fresh meat, the insidious pitfall or easily avoided attack from the natives on foot, armed only with the assegai or loud resounding but little effective "babyjan bow," which is a kind of converted Queen Anne. Notwithstanding the rapid advance of civilisation northward, the colonisation of British Bechuanaland, and the opening up within the past few years of large portions of

Plate I.

Fig. 2.—The Natal Redbuck. (*Cephalolophus natalensis*).

Fig. 1.—The Koodoo (*Strepsiceros kudu*).

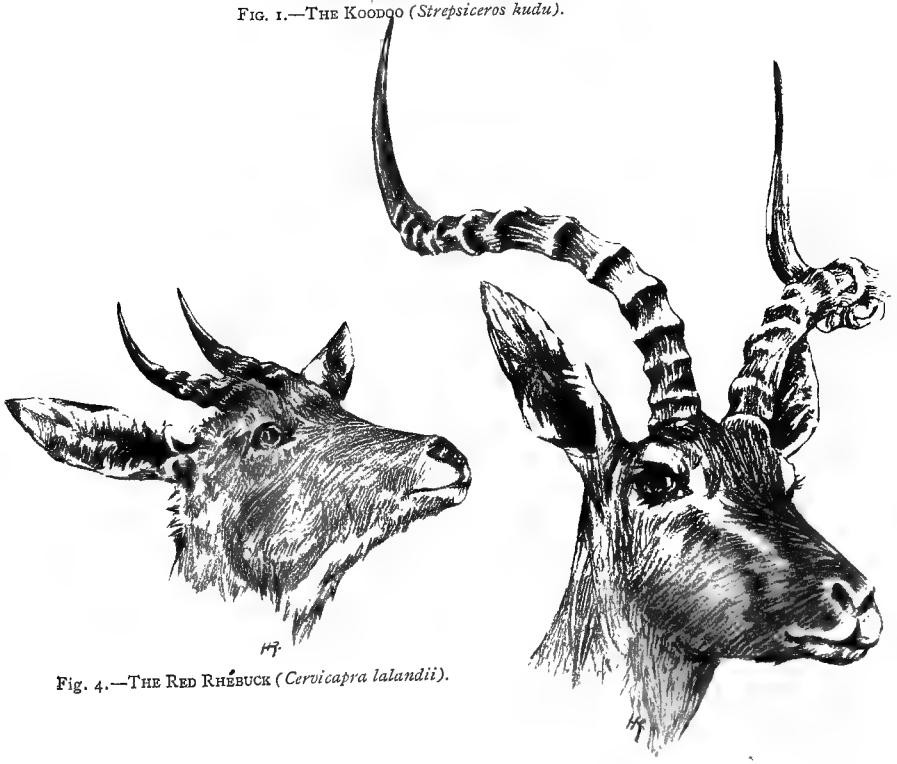

Fig. 4.—The Red Rhébuck (*Cervicapra lalandii*).

Fig. 3.—The Palla (*Æpyceros melampus*).

the territories of Zambesia, game could scarcely have decreased with such rapidity in the Interior had not a short-sighted Government at the Cape permitted the indiscriminate importation of the most approved and highly accurate patterns of modern breech-loading rifles, and the distribution of vast supplies of ammunition amongst the different native tribes. Although the present authorities have at last set their foot on this—in every respect—pernicious system, yet, in spite of the vigilance of the Bechuanaland Border Police, guns and ammunition are still being conveyed across the border from the Transvaal into Linchwe's country, and the effect of the previous weak line of policy remains to be deplored. The different Bechuana tribes, when on their hunting forays, and possessing weapons of great accuracy, spare nothing in the way of game, and old animals as well as their immature offspring equally fell victims to their remorseless bullets. The prodigies of slaughter may be conceived when it is stated on reliable authority that nearly three hundred Giraffes have during the past two years been exterminated in the 'Ngami country merely for the sake of their hides. It would, however, be unfair to leave the entire blame for this deplorable state of affairs on the shoulders of the aborigines, when it is to be remembered that prior to Sir Charles Warren's expedition for the pacification of the "Land of Goschen," and the removal of the encroaching Boers from the Rooi Grond, thousands of Springbuck, large troops of Blessbuck, and numerous Hartebeest and Wildebeest roamed on the vast plains of the country now known as British Bechuanaland. Warren's victory was achieved bloodlessly, so far as human life was concerned, but his advancing squadrons of mounted infantry found plenty of use for their cartridges, and other targets for a mark besides the bodies of the offending filibusters; and at the present time the presence of a single Springbuck, not to speak of larger game, within the boundaries of one of the most recent acquisitions to British territory would be looked upon as an event worthy of record.

Although the *voor-trekkers* (pioneers) of the South African Republic have well deserved the unenviable notoriety accorded them of being, equally with the natives, the most ruthless of game destroyers, they now take special precautions to carry on their depredations outside the limits of their own country; and it will appear strange to the sport-loving Englishman when he is informed that nowhere in the settled and civilised portions of South Africa

are numerous species of the larger antelope so plentiful as in the Transvaal. The Chartered Company of British South Africa have, by the enactment of stringent laws, attempted to stem the tide of slaughter, but owing to the vast extent of their territory, it is feared that insurmountable difficulties will lie in their way to prevent them being carried into effect. It was only when the very last of the American bison stood a chance of being removed from the face of the earth that the United States and Canadian Governments first awakened to the necessity of doing something towards saving the small remnant of these interesting animals from becoming totally extinct.

The questions will now be asked, Is South Africa in a favourable situation? or is she careless of making some determined move of a like nature before the arrival of the inevitable day when it becomes too late? The first question is one that can readily be answered; the second must for the present rest in abeyance.

As specially instanced in the case of Griqualand West, the effectual enforcement of the game laws, and the gradual fencing in of farms by their owners, coupled with the widespread growth of an interest among the sporting inhabitants of that province regarding the preservation of game, have within the last five or six years led to an astonishing increase of Duikers and Steinbuck, as well as some varieties of feathered game. The laudable results thus obtained with a little trouble and at small expense will at least have a lasting effect as regards the smaller gazelles, but if anything of a like nature be attempted in South Africa on behalf of the larger antelopes, it must be on a widely different scale.

Immediately West of the territories of the Bamanwaketse and Bakwaina Bechuanas in the Bechuanaland Protectorate, there are numberless thousands of square miles of the rolling, well-timbered grass country of the Kalahari, unoccupied except by a few half-starved families of Vaalpens and wandering Bushmen, whose sole means of subsistence depends entirely on such edible roots as are afforded by the soil, or the welcome but seldom obtained addition to their frugal fare of the flesh of some animal of the chase. No matter how valuable it may ultimately become for the purposes of cattle ranching, it is improbable that this country—so unjustly termed a "desert"—will ever prove capable of supporting a population of either white or black, owing to the great scarcity of surface water, and although forming a portion of the dominions of the chiefs

at Kanya and Molopolole, it can scarcely be termed the true home of any race of human beings. Undisturbed in the recesses of its little-trodden solitudes, the Eland here attains a far greater size than elsewhere on the African Continent, and it is the natural resort for the Giraffe, the Gemsbuck, and the Wild Ostrich, while Hartebeest, Wildebeest, and Roan Antelope, when unmolested, are capable of thriving and multiplying in a marked degree.

If the world were searched from beginning to end, it would be impossible to discover a locality possessing such natural advantages as this portion of the Kalahari for the establishment of a great game preserve, for this vast country has certainly not been created to serve without any end for the benefit of mankind. As if specially ordained by nature for such a purpose, it is so situated as to be far removed from all highways, and contains an abundance of timber, sufficient to complete hundreds of miles of fence work,* while the necessary water supply can be obtained without much difficulty by sinking on the numerous limestone belts which intersect it. With a little tact and straightforward dealing with the native chiefs, vast areas might thus be acquired at a trifling cost. As matters now remain, it is not beyond the range of probability that after the lapse of the next twenty-five years, the discovery of the remains of some of the larger African fauna will be looked upon with an almost similar degree of interest and veneration as those of the extinct Dodo of Madagascar.

The idea of the scheme here expressed may certainly appear novel, but it is in every sense of the word thoroughly practicable, and we can see no other method by which the successful preservation of South African game on a large scale can be attempted unless by the formation of a gigantic preserve. If the spirit of enterprise in the Cape Colony be so far dead to this important question, it is quite possible that, of the vast number of gentlemen in England who annually spend what may fairly be termed fortunes for the sake of procuring a few heads of red deer on the Scottish preserves, a number of true sportsmen are still left who would be capable and willing to join in the promotion of such an endeavour as that suggested.

It must not be forgotten that Cape Town can now be reached from Southampton in the short space of sixteen days, and that by a

* The great mining district of Witwatersrandt derives its chief supply of timber for shafting purposes from the Westwardly course of the Molopo River in the Kalahari.

further journey of four days by road and rail the traveller can easily arrive at Mafeking, on the South-western confines of the Kalahari. It would, therefore, be possible within a couple of years after the establishment of such a preserve, for a limited number of sportsmen to be in a position to visit the "desert," and there obtain several specimens of the larger antelopes, and still leave plenty for the future.

The chief enemy with which the larger fauna have to contend is undoubtedly man, but with regard to the feathered game, in addition to the same insatiable opponent there are many other and not less merciless adversaries which Nature has ordained as agents for their destruction. Travellers have often expressed surprise that in remote places, and where all the circumstances and surroundings appear to be favourable for their reproduction, game birds do not show any sign of an increase. This, however, can hardly be wondered at when it is remembered that, in addition to the smaller *felidæ* and the numerous varieties of *viverra* (and notably those of the mongoose tribe), there are no less than fifty-two species of hawks and eagles, as well as thirteen different kinds of owls, which are engaged in waging incessant war against them. The preservation of game in England would never have been brought to its present state of perfection if the landed proprietors (and, in some instances, Government legislation) had not adopted effectual means for the eradication of those predatory birds, weasels, stoats, etc., which are common enemies to the preserves. It would be unreasonable to suppose that any Government would encourage the wholesale destruction of the mongoose, owing to its snake-killing propensities, but even the most enthusiastic ornithologist could scarcely object to a thinning off of the extraordinary numbers of the birds of prey which are a constant pest throughout South Africa. We therefore venture to suggest a remedy, which may be found to answer to this desire. Let the respective Governments at the Cape offer a small inducement, by way of reward, for the production before any magistrate, field-cornet, or other person in authority, of the eggs or the complete skin of any of the undermentioned. This plan will appeal to the proverbial cupidity of the natives, and, at a fractional cost to the Governments, should result in a gradual diminution of the evil complained of. The appended list is collated from Messrs. Layard and Sharpe's "Birds of South Africa," and those marked * should be specially singled out for destruction :—

The Secretary Bird† (*Serpentarius secretarius**), the Banded Gymnogene (*Polyboroides typicus*), Montagu's Harrier (*Circus pygargus*), Black Harrier (*C. maurus*), Pallid Harrier (*C. macrurus*), South African Marsh Harrier (*C. ranivorus*), Marsh Harrier (*C. æruginosus*), Chanting Goshawk (*Melierax canorus**), Many-banded Goshawk (*M. polyzonus*), Red-faced Goshawk (*M. gabar*), Black Goshawk (*M. niger*), African Goshawk (*Astur tachiro*), Many-banded Goshawk (*A. polyzonoides*), African Sparrow Hawk (*Accipiter rufiventris**), Little Sparrow Hawk (*A. minullus*), Black and White Sparrow Hawk (*A. melanoleucus**), Jackal Buzzard (*Buteo jakal*), Augur Buzzard (*B. augur*), Salvadori's Buzzard (*B. auguralis*), Rufous Buzzard (*B. desertorum*), Long-legged Buzzard (*B. ferox*), Southern Laemmergeier (*Gypaetus ossifragus*), Verraux's Eagle (*Aquila verrauxi**), Tawny Eagle (*A. rapax**), Wahlberg's Eagle (*A. wahlbergi*), Booted Eagle (*Nisaetus pennatus*), African Hawk Eagle (*N. spilogaster**), Crowned Hawk Eagle (*Spizaetus coronatus**), Martial Hawk Eagle (*S. bellicosus**), African Crested Eagle (*Lophoaetus occipitalis**), African Buzzard Eagle (*Asturinula monogrammica*), Black-breasted Harrier Eagle (*Circaetus cinereus*), Banded Harrier Eagle (*C. fasciolatus*), Vulturine Sea Eagle (*Gypohierax angolensis*), Africa Sea Eagle (*Haliaetus vocifer*), Bateleur Eagle (*Helotarsus ecaudatus*), Yellow-billed Kite (*Milvus ægyptius*), Black Kite (*M. korschun*), Black-shouldered Kite (*Elanus cæruleus*), European Pern (*Pernis apivorus*), Verraux's Cuckoo Falcon (*Baza verrauxi*), African Falconet (*Poliohierax semitorquatus*), Perigrine Falcon (*Falco communis*), South African Peregrine Falcon (*F. minor**), South African Lanner Falcon (*F. biarmicus**), Hobby (*F. subbuteo*), African Hobby (*F. cuvieri*), African Rufous-necked Falcon (*F. ruficollis*), Common Kestrel (*Cerchneis tinnunculus*), South African Kestrel (*C. rupicola**), Large South African Kestrel (*C. rupicloides**), Lesser Kestrel (*C. naumannani*), Red-footed Kestrel (*C. verpertina*), Eastern Red-footed Kestrel (*C. amurensis*), Grey Kestrel (*C. ardesiaca*), Dickerson's Kestrel (*C. dickersoni*), and the Osprey (*Pandion haliaetus*).

† The Cape House of Assembly has just passed a Game Law Amendment Bill, which makes it a penal offence to kill the Secretary Bird. See page 99.

The Game Laws and Close Seasons of the Cape Colony, Bechuanaland, and the Transvaal.

THE close seasons for the different classes of game vary considerably in each district, and are constantly being altered and revoked by proclamation, that for these reasons it is almost impossible for the appended list to be absolutely accurate, but it is sufficiently so to give the sportsman a general idea of the periods in which game may be pursued without incurring penalties.

"Game" is thus defined in the Act:—Paauw, Khoorhan, Guinea Fowl, "Pheasant," "Partridge," Grouse, Dikkop, Elephant, Giraffe, Hippopotamus, Buffalo, Zebra, Quagga, Burchell's Zebra, the whole of the antelopes (with the exception of Springbucks actually migrating), Hares, and Rabbits. The Governor is empowered to proclaim a close season for the several districts of the Colony, with penalties for shooting, killing, capturing, or selling game without a licence. A game licence does not authorise any person to pursue, shoot, kill, destroy, or capture any Elephant, Hippopotamus, Buffalo, Eland, Koodoo, Hartebeest, Bontebuck, Blessbuck, Gemsbuck, Reed buck, Zebra, Quagga, Burchell's Zebra, or any Gnu or Wildebeest of either variety, without having obtained a special permission to that effect from the Governor, under a penalty not exceeding £10 for each offence, or imprisonment with or without hard labour for any term not exceeding one month in default. Landed proprietors, however, and persons authorised by them, may, without such special permission, shoot Elephants upon the property of such landed proprietors. The possession of a game licence does not warrant the pursuit of game on private lands without permission of the owner. The close seasons during which no one shall be allowed to kill game are as follows:—

(*a*) In the districts of Bredasdorp, Caledon, Cape, Clanwilliam, Ladismith, Malmesbury, Mossel Bay, Murraysburg, Oudtshoorn, Paarl, Piquetberg, Riversdale, Robertson, Simon's Town, Somerset East, Stellenbosch, Swellendam, Uitenhage, Uniondale, and Willowmore, from the 1st July to 31st January in each year.

(*b*) In the districts of Aberdeen, Albany, Albert, Alexandria, Aliwal North, Barkly East, Bathurst, Beaufort West, Bedford, Calvinia, Carnarvon, Cathcart, Ceres, Colesburg, Cradock, East London, Fort Beaufort, Fraserburg, Glen Grey, Graaf-Reinet, Hanover, Herschel, Hope Town, King Williamstown, Knysna, Komgha, Middelburg, Namaqualand, Peddie, Philipstown, Port Elizabeth, Port Nolloth, Prieska, Prince Albert, Queenstown, Richmond, Somerset East, Steynsburg, Stockenstrom, Stutterheim, Sutherland, Tarka, Tulbagh, Victoria East, Victoria West, Wodehouse, and Worcester, from the 1st August to 31st January in each year.

(*c*) In the districts of Kimberley, Barkly West, Hay, Herbert, and in the territories known as the Transkei, Galekaland, and Griqualand East, from the 16th August to 15th March in each year.

In addition to the foregoing, the undermentioned animals are prohibited from being killed in the following districts :—

ALIWAL NORTH: Rhébuck, Steinbuck, and Springbuck, until October 1st, 1893.

BARKLY EAST: All kinds of buck until June 1st, 1894.

BARKLY WEST: Ostriches, May 25th, 1893; Hartebeest, Wildebeest, Blessbuck, Eland, Gemsbuck, and Reedbuck, October 1st, 1893.

BEDFORD: Bushbuck, Duiker, Steinbuck, March 1st, 1894; Bushbuck and Rhébuck, February 1st, 1893.

CALEDON: All kinds of buck, February 1st, 1893.

CALVINIA: Gemsbuck and Hartebeest, June 1st, 1894; Duiker, Steinbuck, Rhébuck, and Klipspringer, August 1st, 1894.

CAPE: Rhébuck, June 1st, 1893.

EAST LONDON: Bushbuck ewes, June 1st, 1894; Koodoos, April 19th, 1894.

FORT BEAUFORT: All kinds of game, May 10th, 1894.

GEORGE: Rhébuck, October 1st, 1893.

GRIQUALAND EAST: Oribi, Red Rhébuck, and Reedbuck, Mar. 16th, 1893.

HANOVER: Rhébuck, Steinbuck, Klipspringer, and "Partridges," February 1st, 1893.

HERBERT: Hartebeest, Wildebeest, Blessbuck, Gemsbuck, Eland, and Redbuck, July 1st, 1894; Ostriches, May 25th, 1893; Koodoos, July 1st, 1894; Rhébuck, March 15th, 1895.

HOPE TOWN: Hartebeest, October 1st, 1894.

KIMBERLEY: Ostriches, May 25th, 1893; Hartebeest, Wildebeest, Blessbuck, Eland, Reedbuck, and Koodoos, July 1st, 1894.

KOMGHA: Reedbuck, February 1st, 1893.

MOUNT AYLIFF RESERVE (Griqualand East): All game, March 16th, 1893.

PORT ELIZABETH: Oribi, Rhébuck, and Steinbuck, July 1st, 1894.

QUEENSTOWN: Duikers, May 1st, 1893.

RIVERSDALE: Rhébuck and Bushbuck, June 1st, 1894.

SOMERSET EAST: All game, February 9th, 1894.

STUTTERHEIM: All kinds of game, February 1st, 1893.
SWELLENDAM: Bontebuck and Bushbuck, July 1st, 1894.
UITENHAGE: Oribi, Rhébuck, July 1st, 1894.
WODEHOUSE: Khoorhan, Red and Vaal Rhébuck, Oribi, Klipspringer, and Springbuck, February 1st, 1894.

Game exempted from Act:—George: Hares, February 1st, 1894: Riversdale: Hares, June 1st, 1894.

The following birds are included as game: Quail at Robben Island; Namaqua "Partridges" in the districts of Barkly West, Calvinia, Carnarvon, Hay, Herbert, Hope Town, Kimberley, Namaqualand, and Prieska.

THE TRANSVAAL.

The new Game Law came into operation in the South African Republic on the 1st January, 1892. The seasons for shooting, together with the cost for the necessary licences, are appended.

	£	s.	d.
Small birds, 15th January to 15th August	0	10	0
Ostriches, 1st February to 15th July	10	0	0
Small antelopes, 1st February to 15th September	1	10	0
Big antelopes and beasts, including Zebras, 1st February to 15th September	3	0	0
Elands, Buffalo, Rhinoceros, Giraffe, etc., 1st February to 15th September	10	0	0

Elephants and Hippopotami are not permitted to be shot.

BECHUANALAND.

There is a uniform close season for every description of game in British Bechuanaland* from September 1st to the last day of February.

* See Remarks on Game Birds, page 97.

Plate II.

Fig. 6.—The Steinbuck (*Nanotragus campestris*).

Fig. 5.—The Sable Antelope (*Hippotragus niger*).

Fig. 7.—The Roan Antelope (*Hippotragus equinus*).

Some Remarks on the Shooting Horse and the Hunting of Large Game.

If we except those portions of the low-lying and most unhealthy country on the East Coast between the mouths of the Zambesi and Crocodile Rivers which are impenetrable to horses on account of the presence of the tsetse fly pest,* all the ordinary larger game (if the Koodoo and different varieties of water-loving antelopes be excluded) nowadays roam so far from the permanent waters as to render hunting on foot almost a sport of the past. The success of a hunting trip in the Interior of South Africa largely, if not wholly, depends on the sportsman being in possession of good shooting horses, and when such have been obtained every endeavour should be made to preserve them from the fatal ravages of African horse sickness.

An attempt is being made by the Colonial Government, and by many of the leading scientists in Europe, to discover some antidote to this dreadful scourge, but it is feared no beneficial results have accrued from their labours up to the time of writing.† The disease is far more prevalent and deadly in its effect in the Interior than in other portions of South Africa, but it is noteworthy that with the advance of civilization Northward, the malady equally loses its virulence and becomes more or less stamped out. In corroboration of this statement, it may be mentioned that in the early days of the diamond discoveries at Kimberley it was found almost impossible to

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* This pest is referred to at length in the description of the Buffalo.

† Mr. Strombom, the well-known Interior trader, has been employed by the Colonial Government to conduct a series of practical tests with a remedy which he asserts he has discovered, and for this purpose the horses of the Bechuanaland Border Police at Macloutsie, in the Protectorate, have been placed at his service. The results are, however, not yet known, although there is reason to believe the experiments have been attended with some success. In our opinion no cure exists for this fatal sickness, but a good preventive is recommended, viz.: Place a pinch of carbolic disinfectant powder in the nosebag every night at sundown, care being taken not to remove the latter on any consideration until the sun is well up the following morning and all traces of dew have disappeared.

preserve horses from this scourge in the province of Griqualand West, but now it is only on rare occasions that its presence becomes known there.

The disease generally starts its ravages soon after the fall of the first summer rains, assuming its most deadly form during the months of February, March, and April, gradually disappearing about the middle of May. The symptoms are unmistakeable. The hollows over the eyes of the afflicted animal swell up; a filthy viscid mucus exudes from the nostrils; the respiration becomes hurried and jerky; and death usually occurs within three days. Horses that have once recovered are known as "salted," and though they may, and very often do, again show symptoms of the sickness, death rarely results therefrom. It can readily be imagined, therefore, that a salted horse is highly regarded and prized by the hunter in the Interior, and why it often fetches ten times the amount originally paid for it. Although every other Boer met with in South Africa credibly asserts that he can by its appearance at once detect whether a horse or mule has ever contracted the disease, these statements should never for a moment be acted upon, as there is really no visible method by which such evidence can be ascertained. As a word of warning, and before going to the extra expense of buying a salted horse (as much as from £50 to £100 being demanded for the same), strict enquiries should first be made respecting not alone the character of the seller, but independent testimony obtained in corroboration of the fact of the intended purchase having at one time been afflicted; and although a written guarantee to this effect is always given at the sale, it very often happens that a deliberate fraud has been committed, not more than three out of every ten horses so guaranteed being salted. Redress by legal process in this, as in everything else, generally proves more expensive in the end than the original loss incurred. The Marico district of the Transvaal has the best reputation for turning out salted horses. The mule is just as liable to contract the sickness, but it is noteworthy that donkeys are generally impervious to it.

It is no exaggeration to say that the ponies bred in the mountains of Basutoland are not excelled anywhere in the world for shooting purposes. Although rarely attaining fourteen and a half hands, they are not only possessed of wonderful endurance, but are also capable of thriving in places and under conditions in which other breeds of horses would almost starve. Perhaps they do not equal

the English blooded ponies in point of speed, but they are quite capable, if properly handled, of running the Giraffe or any of the larger antelopes to a stand-still, the Tsessebe and common Hartebeest excepted. It is, however, in their sureness of foot that they excel beyond conception, only to be realised by those who have witnessed one of these ponies, mounted by a great fat Boer of over sixteen stone in weight, gallop at full speed either across a bit of country one network in every direction of ant-bear, meer-cat, and jackal burrows, or down the steep decline of a stony hill.

Anyone unable, on account of the price, or unwilling to undergo the risk of being swindled in purchasing salted horses, is strongly recommended to run the chance of horse sickness, and to acquire unsalted ponies of the Basuto breed. They may be obtained in Basutoland, the Orange Free State, or on the public market at Kimberley, at prices ranging from £10 to £20. Except when constantly driven in harness, it is unusual and quite unnecessary to have a Basuto pony shod, as the hoof is naturally hard and quite capable of resisting the ordinary wear of the most rugged and stony countries. In all cases, no matter what the breed, the shoes of every horse should be taken off before starting for the Interior.

Speed and endurance are, of course, necessary in the shooting horse, but these, if unaccompanied by proper training, are in themselves alone of very little value. Novices in making a purchase are, as a rule, quite satisfied if a horse will stand still on a shot being fired from its back; but although this may often be a point of necessity in case of encounters with Lions or other dangerous animals, it is only a secondary consideration, as no experienced hunter will ever fire when on horseback at running game, unless galloping actually broadside and close on to it. It is a matter of far greater moment and importance to possess an animal that will permit its rider when dismounted and standing beside its head, to let off repeated shots without attempting to run away. Of the several devices used in riding a horse with bolting tendencies, that usually adopted, when dismounted, and before firing, is to merely throw the reins right forward over the horse's head, and insert the right arm through the loop. This, no doubt, is a very simple plan, but there are obvious drawbacks to it, as it frequently happens that, whilst a horse may not actually attempt to run away, he may, from sheer nervousness of disposition, and just at the critical moment when its rider is about drawing on the trigger, start tugging on the

bridle, and thus totally destroy the opportunity of taking anything like an accurate aim. To a hunter, after undergoing the vicissitudes of a long, tiring and exciting chase, this latter situation is calculated to call forth language the reverse of parliamentary, apart from the possibility of losing a good specimen. Another method constantly in practice, although attended with a slight amount of danger, yet nevertheless to be preferred to that just mentioned, is to obtain a thin strip of prepared hide (braid *reimpe*) about a yard and a half in length, to one end of which is attached an iron ring, an inch and a half in diameter, the other end of which is fastened to the rider's belt, the rein being run through the ring. In this manner a check may be obtained on the horse's head without running so great a risk of having the arm interfered with at the moment of shooting. With a little patience, and at the cost of a few rounds of blank cartridges, most horses ought in a short time to be taught to stand fire steadily, but even in the most difficult cases this can be accomplished by tightly tying the head by the rein to either right or left stirrup iron, and if, on firing, an attempt at bolting be made, the animal will be compelled to run in a narrow circle, a proceeding of which it will rapidly tire, and ultimately stand perfectly still.

When hunting, after a chase is over, and indeed, at every available opportunity, the horses should be saddled off and knee-haltered even for the shortest period of time. It is astonishing to observe with what renewed vigour they will work after having had a good roll in the sand. When very far from water, and in a flat bush country devoid of landmarks, it is most unwise at any time to permit even the best trained horse to go perfectly loose, as, in the event of its running away (which it may often do in search of water), the chance of being left alone in the wilderness may occur —a position, it is needless to say, often attended with extreme danger. In this event sportsmen are advised on no account to at once commence running after the straying animal, and only, where everything else fails, should the horse's *spoor* (footprints) be followed, which, though it will eventually lead to water, may not by any means be the nearest. It is a nasty situation, and one that requires a considerable amount of calm consideration. If it is supposed that any companions or natives are in the vicinity, the best course that can be adopted, where practicable, is to set fire to the dry grass, the smoke from which may possibly attract attention. The possession of a compass may obviate any imminent

danger, and no one hunting in the far Interior of South Africa should ever be without one.

Having so many different enemies to contend with, it is nowadays rare for the larger species of game to approach water during the day, except in a few districts where they are seldom disturbed. They generally steal down at night through the bush-covered banks of the rivers to drink, and having quenched their thirst are immediately off again in the direction of their day resorts, which are, as a general rule, long distances away, and which they usually manage to reach before dawn. To be a successful hunter, now, it is not only necessary to be a good rider and a steady, cool, and deliberate rifle shot, but also to be well acquainted with the shape of the spoor imprinted in the sand of the different varieties of game pursued; and, from continual practice, to possess and retain the gift of accurately determining whether such spoor is fresh or stale, which is not by any means easy of acquirement. To a sportsman failing in this respect, the prospects of success are always very uncertain, and the aid of the Masarwas (Bushmen), when obtainable, should invariably be brought into requisition as trackers. If there is any game frequenting the neighbourhood, these nomads of the wilderness, prompted by the hope of obtaining a small piece of tobacco in return for their services, or, what is more dear to them, a supply of fresh meat, will invariably find it out. Perhaps the greatest of all difficulties which a stranger in the country has to overcome is in determining distances, the rarefied atmosphere rendering objects extremely hard to guage, but this can be overcome with constant practice.

For the purpose of obtaining really good sport, it is far preferable to adopt a systematic rather than a haphazard course. Just at daybreak, being already mounted, it will be found expedient to carefully examine the spoor of the different animals which have been to drink during the night, and, having chosen such of the species as may be desired, and which have been the last to leave their imprints along the muddy banks, to follow them up step by step. The Masarwas start off at a quick run, which they are capable of sustaining for hours together, picking out the spoor with unerring accuracy in all its windings from perhaps thousands of others; and if they are at all lucky, will generally manage to point out the game before the heat of the sun makes further exertion uncomfortable for man or beast. The chief drawback attending the hunting of the Giraffe, Eland,

and Gemsbuck is the difficulty of watering the shooting horses regularly in the thirst-lands frequented by these animals. Oxen will work constantly under favourable circumstances, and keep in condition, if watered once daily, whilst a horse in such a warm climate, when continually used in severe chase, will quickly knock up and become useless unless it drinks at least twice daily. The possession of a good water cart is desirable, and will save many troubles and annoyances, and very often the loss of a valuable shooting pony. In hunting game in the "thirst," the cart, to which four or six oxen are yoked, should be filled with water and a start made the previous evening, which must be continued during the night as far as possible in the direction of the intended operations on the following day. Just when there is sufficient light to see, the search for fresh spoor should commence, care always being taken to advance up wind, the water carts keeping in touch with the horses' spoor at a distance from which the cracking of the driver's whip is inaudible. When a Giraffe, Eland, or Gemsbuck is sighted, hard straight riding should invariably be the order of the day, as the animals mentioned, if hard pressed at the start, will readily give in and can be ridden down much quicker than if allowed to adopt their own pace at the commencement of the chase. At such times the assaults sustained from thorns, the dangers of meercat, jackal, or yawning ant-bear holes, should be unworthy of the thoughts of a very enthusiastic sportsman who takes part in the most exciting and glorious sport in the world.

It is somewhat difficult at the commencement to get into the knack of shooting running game, as in the first place a certain amount of practice is absolutely necessary, success depending much less on the extreme accuracy of aim than the possession of a cool judgment at the critical moment. It is either the want of knowledge of distances before referred to, coupled with a supreme anxiety to kill, that renders the first attempts of the novice fruitless; and this is scarcely to be wondered at when it is an established fact that even the oldest and most experienced hunters, after undergoing the vicissitudes of a long and tiring stern chase on horseback—carrying a heavy rifle in the heat of a tropical sun—will occasionally, even at close quarters, fail in hitting the large surface presented by the body of a full grown bull Giraffe. When shooting on foot in thick bush, whether the animals be dangerous or not, a thorough recovery from a very common disease usually known as "buck fever," and which is

peculiar to the young and uninitiated hunter, is the first essential. The flesh of most of the larger antelopes, especially of all the varieties of water antelope, should be eaten when quite hot, otherwise the fat (which, it must be confessed, is rather rare to find), if allowed to cool, clogs the palate and teeth in a very disagreeable manner. The Bechuana term for all four-footed game is *pholoholo*.

It cannot be too strongly impressed upon the sportsman how absolutely necessary it is for future verification, immediately on his return from camp with a specimen, whether fur or feather, to plainly mark the same with the locality in which it was obtained, together with its name, both Native, English, and Dutch, and the date upon which it was shot. New varieties may often be determined if such a plan were adopted, alike of interest to sport as it is of value to science.

ANTELOPES.

The Steinbuck (*Nanotragus campestris*). Fig. 6, Plate II.—(*Steinbok* of the Dutch; *Phuduhudu* of the Bechuanas; *Umgwena* of the Matabele; *Gayee* of the Masarwas.)

[*Height about 23 inches.* General colour, light purplish reddish brown, darker on the top of back and neck, approaching fawn, and white underneath; hair thick and close, as if broken at the ends; tail extremely diminutive. Horns† are usually between 3 and 4 inches in length, vertical, straight, and sharp, somewhat annulated at extreme base. Female hornless, and of a more yellowish colour throughout. Spoor, 1 inch, heart-shaped.*]

The Steinbuck is the most common and widely distributed of the gazelles of South Africa, and may be found from Capetown to the Zambesi, frequenting the open flats either singly or in pairs. Owing to its wonderful fleetness, it may be said, from a coursing point of view, to take the place of the English hare, as the different varieties of hare in the Cape Colony afford little or no sport. At Kimberley, in Griqualand West, a regular coursing club was organised shortly after the discovery of the diamond fields, and it has been carried on ever since with the greatest success, the Colonists being just as much interested in the result of the annual club cup as sportsmen are in England over the Waterloo Cup, large sums of money changing hands at the meetings. It requires, however, a really

* The measurement of all animals herein referred to is taken from the shoulder, and is to be so understood in subsequent descriptions.

† It must not be presumed, as is sometimes the case, that the age of the horns of any of the numerous varieties of South African antelopes is in the least revealed by the number of rings they carry, there being no equal relation between their development and the prolongation of life. It is true, however, that the annuli do increase somewhat as they advance in growth, but it is also a fact that the rings become fewer as the animals reach maturity and subsequent old age.

Plate III.

Fig. 8.—The Blue Wildebeest (*Cannochætes taurinus*).

Fig. 9.—The Blessbuck (*Damalis albifrons*)

Fig. 10.—The Buffalo (*Bos caffer*).

fast powerful greyhound with a lot of bottom to run up on a Steinbuck. As nearly all proprietors strictly preserve the species in Griqualand West, they are there very numerous, perhaps even more so than in the native territories further North. This gazelle commences feeding about sundown, and continues its wanderings during the night, at sunrise retiring under cover of some low thick clump of bush or patch of long grass, where, unless disturbed, it passes the entire day in concealment. As it usually lies asleep during the great heat of the sun, it can then be easily walked up to and readily disposed of with a charge of buckshot. When severely wounded or hard pressed by dogs, it will often take refuge in the burrow of the *ardvaark* (ant-bear). At all times the Steinbuck is rather a difficult shot with the rifle; but if the half-hour before dusk or sunrise be chosen, some pretty rifle shooting may be obtained, and a quiet stalk at such times through a *veldt* which they frequent will often well repay the sportsman when larger antelopes are not at hand. The wind has no influence with regard to the direction in which it goes, as it will run either up or down wind. It does not frequent very hilly or thick bush country, and is capable of existing for long periods without water. The Steinbuck is very easily tamed, but invariably becomes blind when kept in captivity for any length of time. The flesh is excellent.

The Oribi (*Nanotragus scoparius*). Fig. 15, Plate V.

[*Height about 2 feet. Body stouter and more compact than the Steinbuck, the colouring being more yellowish, with white below; hair and tail longer. Horns about 5 inches in length, straight and pointed, being considerably annulated above the base. Female hornless. Spoor same shape as, but slightly larger than, the Steinbuck.*]

This antelope is very common on the open plains of Natal and Zululand, where it is better known than the Steinbuck, which it closely resembles in its habits and appearance, if we except the conspicuous brushes on the knees and black tail which the Oribi possesses. It frequents the Transvaal in fair numbers, the Eastern districts of the Cape Colony, and the Orange Free State, as also portions of Matabeleland and the country in the neighbourhood of the Victoria Falls on the Zambesi, and about Fort Victoria in Mashonaland. One or two specimens are said to have been obtained in Bechuanaland, but it is unknown in the Kalahari and to the Westward. It frequents

open flats, singly or in pairs, within reasonable distance of water. In speed it is very fast, dodging from side to side in a peculiar manner with a series of leaps and rushes. The flesh is fairly good.

The Grysbuck (*Nanotragus melanotis*). Fig. 29, Plate VIII.—(*Grysbok* of the Dutch; *Sashlungwan* of the Matabele.)

[*Height about 22 inches. Coat rather long and coarse, of a uniform deep reddish chocolate, profusely mingled with white hairs, which gives the animal altogether a grizzled appearance; head broad and short; tail very short, scarcely extending beyond the hair of the rump. Horns, 3½ inches, smooth and round. Females hornless. Spoor almost same as Steinbuck, but smaller.*]

This wary antelope is found in the Cape Colony, particularly in the Eastern districts and on the borders of Natal, being unknown in the Transvaal, Bechuanaland, Damaraland, Namaqualand, or Ovamboland. In the hilly country along the Zambesi and Northern Mashonaland it is very common, but is scarce in Matabeleland proper. Its habits are solitary, and are almost identical with those of the Steinbuck, with the exception that it invariably frequents hilly, broken, and stony country in preference to the open flats. The flesh is not particularly good.

The Klipspringer (*Oreotragus saltator*). Fig. 18, Plate V.—(*Klipspringer* or *Klipbok* of the Dutch; *E-go-go* of the Matabele.)

[*Height about 22 inches. General colour, dark brownish grey tinged with green. The fur is very peculiar, and much resembles hogs' bristles, each hair being hollow and tipped at the points with yellow, the appearance of the coat being exceedingly like that of the hedgehog. Head short and broad, the form being robust and square. Horns average 3½ inches, slightly inclining forwards and distant, being sparely wrinkled at the base and somewhat annulated in the middle. Females hornless. The spoor is almost round in appearance, the base of each hoof not being much larger than a threepenny piece.*]

This little antelope, the chamois of South Africa, was at one time very numerous on the mountains around Capetown and Simonstown,

and is said to be still occasionally met with there; but from thence to the Zambesi, in very broken and mountainous country, it is fairly common. In the hills about Kanya and Molopolole, in the Bechuanaland Protectorate, it is plentiful, as also in the Zoutpansberg, Waterberg, and Murchison Ranges in the Transvaal, and throughout the broken portions of Matabeleland. It is always a very wary little animal, difficult to reach with a shot gun, and its diminutive size does not afford an easy mark for the rifle. The hoofs, unlike other species of antelope, do not project to a point, but are formed almost similar to those of the European chamois, which it closely resembles in its habits. It is thus enabled to obtain a foothold on the face of almost perpendicular rocks which would appear inaccessible to any animal. It invariably frequents the tops of the highest *kopjies* (hills) and only descends to the valleys when darkness sets in for the purpose of drinking, which it does regularly. Driving is the best, if not the only, plan by which a shot can be obtained at the Klipspringer, stalking being rarely successful, as the hill summits are generally covered with stunted bush or herbaceous plants, which afford concealment to the animal when reclining during the daytime. They do not associate together in herds. The Klipspringer is easily tamed and makes a most sagacious pet, but from a habit they have of nibbling at everything which could possibly injure them, they usually fall victims to their own irregular appetites. A storekeeper at Kanya had several of this species thoroughly domesticated, but they all succumbed in time to the poisonous effects of eating the cast-off leaden capsules of whisky bottles! The flesh is extremely good.

The Duiker (*Cephalolophus grimmi*). Fig. 26, Plate VII.)—(*Duiker-bok* of the Dutch; *Puti* of the Bechuanas; *Impuzi* of the Matabele.)

[*Average height of adult male about 26 inches. General colour, a mixture of dark grey and brown, with an olive tinge, whitish beneath. Horns about 4 inches in length, placed close together far back between the ears, standing a little outwards, annulated at the base, a long tuft of hair projecting in the centre. Females usually hornless, but they are occasionally met with in the Kalahari and Bechuanaland carrying short and imperfect horns. Spoor, 1½ inches, heart-shaped, being narrower at the heel in proportion to that of the Steinbuck.*]

THE DUIKER ("diver" or "dodger") is, next to the Steinbuck, the most common and widely-distributed of the smaller antelopes, and may be found sometimes in pairs, but more frequently singly, in every suitable locality from the vicinity of Table Bay to the Zambesi. Its most favourite habitats are usually flats covered with long grass, with here and there patches of thick bush. It also frequents the slopes of low sparsely-wooded hills, but is rarely met in a much broken country. Its habits are almost similar to those of the Steinbuck, wandering about on the feed during the night, and reclining during the entire day in some clump of bushes. It is much more wary, however, than the animal above referred to, and even during the hottest hours of the day appears to be on the *qui vive*. From its peculiar habit of diving with great rapidity under and in and out through the bushes, although approached unawares, it is not by any means easy to shoot, even with a shot gun. Possessing, also, great vitality, unless actually killed outright, it often manages to effect its escape. The Duiker varies considerably in size and appearance according to the districts in which it is found, those of the Cape Colony and Griqualand West being, as a rule, smaller and lighter in colour than those in the countries farther North. In those portions of the Kalahari which have no permanent surface water they are very common, and attain their largest size, some specimens having been shot which measured 28 inches at the shoulder; hence the confusion caused by the supposition that there was more than one variety of this species. Unlike the Steinbuck, this antelope is not of a wandering disposition, and will often frequent, if not much disturbed, exactly the same spot for more than one season; in addition to which its capability of subsisting without water for lengthened periods is greater. The flesh is not so good as that of the Steinbuck.

The Natal Redbuck (*Cephalolophus natalensis*). Fig. 2, Plate I.

[*Height about 2 feet. General colour, orange red, much darker above, paleing below; ears rather large. Horns rarely exceed 1½ to 2 inches in length, placed close together with a backward sweep, a long tuft of hair being between. Spoor same as the Duiker, but rather smaller.*]

THIS antelope is found only in Zululand, Natal, and the Southern portions of Swazieland, but is everywhere very scarce. It is, how

ever, stated on good authority to have been recently found in South-eastern Mashonaland. Its habits closely resemble those of the Duiker, to which species it is apparently allied, except that it chooses dense forests as a residence, from which it only emerges in the evening, or during wet weather.

The Bluebuck (*Cephalolophus monticola*). Fig. 11, Plate IV.

[*Height about 13 inches. General colour, slaty mouse, white beneath, round the eyes being devoid of hair; head long and pointed, not unlike a rat in appearance. Horns about 1½ to 2 inches in length, closely annulated and reclining. Female smaller, hornless. Spoor scarcely exceeds ½ inch in length.*]

The Bluebuck is the most diminutive of all the South African antelopes, and even the most practised eye will frequently fail to detect its presence. It is only found in the coast districts of the Cape Colony, and occasionally in Natal, being nowhere plentiful. Its habits are solitary, and it confines itself to the dense bush and forest, from which it is difficult to dislodge, darting from cover to cover when pursued by dogs with a celerity that is surprising. It emits a nasty musky odour. Flesh not particularly good.

The Springbuck (*Gazelle euchore*). Fig. 20, Plate VI.—(*Springbok* of the Dutch; *Tsepee* of the Bechuanas.)

[*Average height 31 inches, often exceeded in North-west Bechuanaland. General colour, bright rufous down the flanks, being marked on each side with a rich chestnut horizontal band, verging into dark plum as it joins the white of the belly, which is pure white inside legs; folds of skin over rump, when animal is excited, exhibit a snow-white crested patch; under portion of neck white; face and breast white, a chestnut streak passing from between the horns to nose; tail 8 inches long. Horns of male black, lyrate, about 12 inches in length along the curve, plentifully annulated. Female with horns, narrower, more slender, and less curved. Spoor much heart-shaped, slightly under 2 inches.*]

The period when Gordon Cumming says the plains of South Africa were literally covered with countless herds of this beautiful antelope is now long past. At the present day some flocks of Springbuck may be found in portions of the Cape Colony, particularly in the Karoo belt about Beaufort West, Carnarvon, Calvinia, and Little

Namaqualand, but only on those farms of the Dutch and English settlers where they are preserved, and from whom permission to shoot should on all occasions be first obtained. The same remarks equally apply to the Orange Free State and the Transvaal. The year previous to Sir Charles Warren's Bechuanaland Expedition in 1884, the plains in the neighbourhood of the great salt-pan at Groot Choiang, about 30 miles North of Vryburg, were frequented by large herds, but now it is only on rare occasions that a stray one may be met with there, and which has probably crossed from the preserved farms of the Transvaal Boers on the other side of the border. Throughout the remaining portion of Bechuanaland they are nearly extinct, and the next 12 months will probably see the last of them in that region. On the open arid flats, both North and South of the Botletle, where the road from Palapye to Lake 'Ngami strikes the river, they still roam in large herds, as well as in the neighbourhood of the Makari-kari salt-pans. In Great Namaqualand, Damaraland, and portions of Ovamboland they are still fairly plentiful. The Springbuck is very migratory in its habits, and in the past, in seasons of drought, was wont to change its feeding grounds, when thus on the move assembling in herds of such enormous extent that reliable authorities have stated that as far as the eye could reach the entire plains have been one living mass of trekking buck. Their favourite haunts are perfectly open flats, and it is only during the extreme cold of the winter nights, or occasionally in the lambing season, that they seek shelter in the bush. It derives its name from the peculiar habit, when startled, and sometimes even in mere playfulness, of springing from the ground often to a height of 8 feet, arching its back and lowering its head, a ridge of hair extending along the spine being elevated into a crest. It is also curious to observe that when a flock on the move meets with a wagon road or beaten track, each animal, instead of running across the same, will clear the space at a bound. In speed they excel all other South African antelopes, but are not possessed of the same amount of endurance as the Tsessebe or Hartebeest. It requires a great deal of practice, and a facility for accurately determining distances, to become even a tolerable Springbuck shot. Owing to the unequal refraction on the open sandy flats, the light is most uncertain, and objects at a considerable distance appear as if actually at hand. It is, then, not to be wondered at why crack target shots often miserably fail in bringing down a single animal when a Spring-

buck is the mark for their bullets; nor is it by any means uncommon to observe trained sportsmen fresh from England, and armed with the best and most accurately sighted rifles, aimlessly discharge 50 to 60 cartridges without result, whilst a Boer or anyone accustomed to the sport will generally be successful at least once out of half-a-dozen tries. Moreover, Springbuck are now a days extremely shy, and it is quite an exception to obtain a shot at a closer range than 300 or 400 yards. It is strange, but nevertheless a fact which all experienced hunters will confirm, that it is merely a waste of cartridges to fire into the "brown" of a flock, no matter how numerous or closely packed the animals may be. The usual plan adopted by the Boers (than whom there are no finer shots in the world at moving objects) when hunting the Springbuck is for six or more horsemen to approach from different directions in the endeavour to scatter the herd before firing. If this can be accomplished, the animals get much confused, and are then readily approached at close shooting distance. Another method which is recommended is to have a span of oxen driven towards a herd of these antelopes, and by keeping well among the cattle, it will be possible to get to within 50 or 60 yards of them. During the chill winter months, it has been observed that the species will often forsake the open flats towards sundown, and take refuge from the cold of the night in some neighbouring bushes. On such occasions excellent stalking may be obtained at dawn of day, at a time when, according to a Boer saying, "there is sufficient light to enable one to distinguish the chestnut patch on the bucks' sides." A common practice, which can often be adopted with success, and is recommended, is to loose some dogs not possessed of any great speed into a flock, a proceeding at which the Springbucks are no wise terrified, their attention being concentrated and their curiosity excited during the futile efforts of their pursuers to overtake them as they gambol around, when they can be readily approached to very close quarters. They usually drink every second day, but often sustain themselves for a week at a time without water. The flesh is excellent.

The Blessbuck (*Damalis albifrons*). Fig. 9, Plate III.—(*Blesbok* of the Dutch; *Nunni* of the Bechuanas.)

[*Average height of adult male about 3 feet 2 inches, occasionally larger. General colour, light hoary brown, approaching chestnut*

on flanks and thighs; belly and inside of legs bluish white; front of face from between horns covered with large pure white patch; tail 16 inches. Horns from 13 to 15 inches long, dirty white, lyrate, divergent, with several wide half rings on frontal edging. Females with horns, but more slender. Spoor similar to the Springbuck, about 2½ inches.]

This antelope is now only found ranging on some farms in the Transvaal, and on one or two in the Orange Free State. Previous to Sir Charles Warren's Expedition in 1884, they were fairly common on the open flats in Southern Bechuanaland, particularly in the neighbourhood of Groot Choiang, and also in the district of Rhamathlabama, a few miles North of Mafeking. They are now practically extinct there, an occasional troop only straying from beyond the Transvaal border from the preserved farms. This species is gregarious and formerly frequented the vast open plains along the Vaal and Orange Rivers in incalculable numbers with the Springbuck, which antelope it resembles closely in habits, and almost equals it in speed. They can be closely approached with a herd of cattle, when a shot may be offered, as in the case of the Springbuck, although they are more wary than that antelope. The flesh is excellent.

The Bontebuck (*Damalis pygargus*). Fig. 27, Plate VII.—(*Bontebok* of the Dutch.)

[*Height varies from 3 feet 4 inches to as much as 3 feet 11 inches. General colour, light chocolate brown, changing into a rich dark shining chestnut on the neck, flanks, and thighs; space around tail, belly, and legs, from the knee down, with face, pure white. Horns 15 inches, black, erect, lyrate, thicker at base than the Blessbuck, well annulated. Females have horns, but more slender.*]

This variety, which is one of the largest of South African gazelles, cannot now be considered as a part of the wild game of that country, as it is to-day believed to exist only on the farm of a gentleman named Van der Byl, near Swellendam, in the Cape Colony. Formerly it used to roam in incredible thousands in the Orange River and Karoo districts, but indiscriminate, wilful, and senseless slaughter has rendered it practically extinct. Its habits resemble those of the Blessbuck in almost every particular, it being, however, much more piebald and more humped than that animal. A pecu-

Plate IV.

Fig. 11.—The Bluebuck (*Cephalolophus monticola*).

Fig. 12.—The Waterbuck (*Kobus ellipsiprymnus*).

Fig. 13.—The Hartebeest (*Bubalis caama*).

Fig. 14.—The Lichtenstein Hartebeest (*Bubalis lichtensteini*).

liarity of both varieties, when on the gallop, is the habit they have of beating against wind, keeping their heads close to the ground like a hound on the scent.

The Tsessebe (*Damalis lunatus*). Fig 19, Plate VI.—(*Bastard Hartebeeste* of the Dutch; *Tsessebe* of the Bechuanas; *Incolomo* of the Matabele; *Lechu* of the Masarwas.)

[*Height 3 feet 10 inches. General appearance almost identical with the Hartebeest, the head, however, being broader at the top, and body bulkier. Horns about 12 inches, crescent-shaped, well annulated. Females with horns, but more slender. Spoor almost indistinguishable from that of the species above referred to.*]

This antelope does not frequent the Cape Colony, its most Southern range being Sichele's country in the Bechuanaland Protectorate. It is occasionally met with in the extreme confines of the Transvaal bordering the Crocodile or Limpopo River, and is still fairly numerous in the Matabele and Mashona countries, where not driven out by the invasion of gold prospectors during the last two years; but it is very plentiful in places in the independent native territory on the East Coast North of the Crocodile. Immediately South of the Zambesi, about the Chobe, Mababe, and Botletle Rivers, and in the neighbourhood of Lake 'Ngami, it is even to-day quite common. The Tsessebe is the fleetest and most enduring of all the larger antelopes of South Africa, the calves shortly after birth being able to keep up with those that are full grown. Like the Hartebeest, it is a stupid animal, and is as easily confused, its habits and characteristics also being almost identical. Although not in the habit of drinking daily, it never appears to stray such long distances from water as the Hartebeest or Wildebeest. Its paces are jerky and irregular like the Hartebeest, and the flesh is rather good.

The Rhébuck (*Pelea capreola*). Fig. 24, Plate VII.—(*Vaal Rhébok* of the Dutch; *Peeli* of the Bechuanas.)

[*Average height of male 30 inches. General colour, dirty light greyish brown, underneath white; tail short, broad, and fan-shaped; body long and slim; neck attenuated; ears long and pointed; coat thick and woolly. Horns average 8 inches in length, wide apart,*

slender, and pointed, with a very perceptible bend forwards, well annulated from base. Females hornless. Spoor very much indented, round at the points of the hoofs, about 1¾ inches in length.]

This species is fairly well distributed throughout the Cape Colony, the Orange Free State, Transvaal, Bechuanaland Protectorate, and portions of Natal, Matabeleland, and Zululand, but nowhere at the present day is it to be found in large numbers. Like the Red Rhébuck and the Klipspringer, it is only met with in very broken country, frequenting the highest points of the mountains and *kopjies*, never descending to the valleys or plains except at night when in search of water. It is generally found in flocks of six or seven up to a dozen, and is most wary and difficult of approach, one old ram usually standing on guard while the remainder feed. On the least sign of danger, the sentry immediately decamps among the rocky boulders, being instantly followed by the whole herd, springing from rock to rock with great activity. Driving is the best plan to adopt when hunting this species, the guns taking up a position in some narrow valley through which the Rhébuck are bound to pass on being driven by natives and dogs from one range of hills to another. It is worthy of remark that at certain portions of the year the entire body of this animal is often found to be burrowed with a large sort of warble, and consequently the flesh at such times is unfit for food, in addition to which it decomposes with great rapidity.

The Red Rhébuck (*Cervicapra lalandii*). Fig. 4, Plate I.—(*Roi Rhébok* of the Dutch.)

[*Height seldom exceeding that of a large Duiker, and averaging about 28 inches, the body, however, being much stouter. The hair is much longer and coarser than that of the Reedbuck (fig. 23, plate VII.), and is of a very reddish brown colour, underneath showing white strongly. Horns rarely exceed 8 or 9 inches, bending sharply forwards in a short sweep without opening outwards, well annulated from the base. Females hornless. Spoor deeply marked, slightly open at the points of hoof, a shade over 1½ inches in length.*]

In the course of research we have been somewhat surprised to find that naturalists have classified this antelope into two varieties, one being the name under which we think it should be known, and the

other the "Lesser Reedbuck" or *Reitbok*. It is true that the question has been raised before; but it has, as we believe, been too hastily assumed by experienced men like Harris that it is the young of the Reedbuck; whereas our investigations and observations lead us to suppose that the "Lesser Reedbuck" is merely a young specimen of the common Reedbuck, the Red Rhébuck being wholly distinct from that animal. One writer has even gone so far as to assert that the latter resembles the Vaal Rhébuck (*Pelea capreola*) in every particular except the colour of the coat! In the Osteological Section of the Natural History Museum, South Kensington, there is a single specimen of horns which was sent from the Orange River so long ago as 1830, and which bears a greater resemblance to the Reedbuck than do those of the Red Rhébuck, although they are much smaller, but which, on account of their being taken from a full grown animal, are apparently a distinct species. Whether they are the horns of the so-called "Lesser Reedbuck" or not we cannot determine; but if so, that antelope must long since have become extinct, if, indeed, it ever existed. It is very certain, however, that the Red Rhébuck is as different from the Reedbuck as the Oribi is from the Springbuck, in confirmation of which the habits of the two varieties are totally at variance with each other. The former, which runs in herds often exceeding 20 in number, invariably frequents the summits of hilly and mountainous districts where there are no reeds, and from whence water may be miles and miles distant. The Reedbuck, on the contrary, either in pairs, or never exceeding four at a time, is only found in low-lying country along those rivers which have reeds lining their banks. The one peculiarity common to both species is the fact that the males, when alarmed, give vent to a shrill whistle. As a deduction, therefore, and in the absence of any proof to the contrary, we are bound to assume that the so-called "Lesser Reedbuck" has been confused with the Red Rhébuck, which, by the way, is probably identical with the Nagor (*Cervicapra redunca*) of West-central Africa. The Red Rhébuck is generally found in favourable localities all over that part of Africa South of the Zambesi, but more plentifully in the mountainous ranges of the Transvaal and the broken country in the Bechuanaland Protectorate, especially in the vicinity of Sichele's stronghold. Resorting to inaccessible places, it is nowhere by any means abundant, and consequently specimens are but seldom obtained. Like the Rhébuck (*Pelea capreola*) one

old ram of a herd constantly acts as sentinel while the remainder feed, and on the least approach of danger at once gives the alarm by shrilly whistling. The flesh is somewhat poor.

The Reedbuck (*Cervicapra arundinum*). Fig 23, Plate VII.—(*Reitbok* of the Dutch; *Cipohata* of the Bechuanas; *Umvwee* of the Makobas and Masieuvias; *Inzeegee* of the Matabele.)

[*Height about 3 feet. General colour, pale fawnish brown, approaching orange about the head; belly and inside of legs a dirty white; hair short and somewhat woolly. Horns average 12 inches, sometimes attaining to 16 inches, boldly annulated, bending outwards and sweeping forwards. Female hornless. Spoor heart-shaped, somewhat narrow at heel, a little over 2 inches.*]

It is now extremely rare to meet this species in the Transvaal, except along some of the rivers in the North-eastern districts, and in Bechuanaland it is virtually extinct, although five years ago it was fairly common in the reeds of the Molopo, close to the site of the present town of Mafeking. In portions of the British Protectorate bordering the Crocodile, and along the North-western tributaries of that river, it may still occasionally be met with, but nowhere there in plenty. In the low country on the East Coast about the Pungwe and Sabi Rivers it is extremely numerous. On those rivers of Mashonaland and Matabeleland which are margined with reeds, and where not driven out by the natives and prospectors, it may in places be plentifully found. But along the Chobe, Mababe, Tamulakani, and Botletle Rivers (where the banks are not precipitous) it is still quite common. In the dry reed patches bordering Lake 'Ngami, the Taouhe, and Okavango, as far up as Indali's, from which the water recedes during several months of the year, the Reedbuck is particularly numerous; so much so as to lead to the erroneous impression that the antelope is gregarious, so many often being observed together at one time. It is usual to find the rams and ewes consorting in pairs, accompanied by a couple of their immature progeny, usually frequenting dry patches of reeds; but when these become flooded they often resort to the bush in the immediate vicinity of water. Although always found in proximity to the latter element, the Reedbuck when pursued will never take refuge in it, but in endeavouring to escape will direct its course right away from the river beds towards the shelter of the

thick bush, and where such is not at hand even into the open country. When suddenly alarmed, the males sometimes give vent to a whistle resembling that of the Red Rhébok (*Cervicapra lalandii*). The species is rather easily approached, and the gallop being slow and regular, it is perhaps the easiest of the South African antelopes to shoot; but at the same time it must be remarked that this, like all the other water-resorting varieties, possesses an extraordinary amount of vitality. The flesh is scarcely palatable, but the liver is considered a tit-bit.

The Bushbuck (*Tragelaphus sylvaticus*). Fig. 16, Plate V.—(*Boschbok* of the Dutch.)

[*Height of full-grown male about 34 inches. General colour, dark chocolate, darker above, occasionally marked along the spine with a thin white streak, together with a few round white spots on cheek and flank. Horns average a little over 12 inches, erect, spiral, closely wrinkled at base, with sharp, smooth points. Females hornless. Spoor oblong, heart-shaped, and sharp, very small in comparison to the animal's size, about 1½ inches.*]

Although such an eminent authority as Mr. Selous considers the ordinary Bushbuck of the Cape Colony and the Harnessed Antelope (*Tragelaphus scriptus*) of Lake 'Ngami, the Chobe, and North-western Africa to be specifically identical, without entering into such a question here it is thought better to separately treat the varieties—if, indeed, they be varieties—as they vary considerably from each other both in size and colouring. As specimens of both are at present to be seen in the Zoological Gardens, London, those taking sufficient interest in the matter may solve the question to their own satisfaction from personal observation. The Bushbuck is found in all the maritime divisions of the Cape Colony and Natal wherever there are any considerable belts of thick bush. It is unusual to come across more than a pair of adults together at the same time, and it rarely ventures in the daytime from the impenetrable bush unless driven, only emerging into the open glades to feed during the darkness of the night. Like the Koodoo, when pursued it keeps as much as possible to the bush, through the thickest portions of which it penetrates with the greatest facility, the horns at the time being thrown backwards along the neck, which is generally denuded of hair, this probably being caused by constant rubbing against the

underwood. In the neighbourhood of Port Elizabeth the antelope is very strictly preserved, as it is in most other places in the Colony in which it resorts. About Easter time every year *battues* are inaugurated, when large drives of Bushbuck take place. On these occasions numbers of natives, with the assistance of dogs, are employed to beat the wooded *kloofs*, driving the game towards the guns, which are generally placed in some narrow neck or outlet from the valleys. Although a small antelope, it is nevertheless a dangerous one to tackle when wounded or driven to bay, as it will frequently charge with great determination, and with its sharp horns plays havoc among such of the dogs as have the rashness to approach too near. The species found on the Crocodile River, and alluded to by Gordon Cumming as the *Antelopus roualeynei*, is smaller in size and more reddish in colour, the fur being also longer than that of the Colonial variety. Some few years ago they were very common along the thick bush-covered banks of that river, particularly near its junction with the Notwani. They are now very scarce there, being continually disturbed by the numerous travellers on their way to the recently opened-up country of Mashonaland. The flesh is considered excellent.

The Harnessed *or* **Spotted Bushbuck** (*Tragelaphus scriptus*). —(*Serulebutluku* or *Seropesabotluku* of the Bechuanas; *Imbabala* of the Matabele; *Unkurungu* of the Makobas and Masieuvias.)

[*Height of adult male about 31 inches. In appearance this variety is perhaps the most beautifully marked of any antelope in the world, the full-grown males being a rich deep red, profusely marked with large round white spots, eight well-defined stripes generally running evenly across the back, meeting on a white streak on each side, an erectable mane extending the whole length of spine. Females approach a yellowish red, well spotted, stripes not being so well-defined as in males. Horns average about 10 inches. Females hornless. Spoor same as* T. sylvaticus, *but smaller.*]

Individually or in pairs this antelope frequents the dense bushy banks of some of the tributaries of the Zambesi in the neighbourhood of the Victoria Falls, while along the Chobe, Botletle, and Oka-

vango Rivers it is still quite common.* It is never found more than a couple of hundred yards from the water, and during the day lies closely in the thick cover afforded by a species of sharp spear-pointed flagger-like plants (which only flourish in the shade of the forest in the immediate vicinity of the rivers), from the fibre of which the Makobas and Masieuvias make their fishing nets. The emigrant Boers call this plant "ballstikker." As it is next to an impossibility to get this antelope to break cover, the shot-gun with a charge of buck-shot is much preferable to the rifle.

The Inyala (*Tragelaphus angasi*). Fig. 28, Plate VIII.

[*Height of adult male about 3 feet 7 inches. General colour, a dark greyish brown, mingled with white hairs about the neck; long thick fringe of shaggy dark brown hair commencing at chin, extending down the throat and breast, between the forelegs, ending in the middle of the belly; patches of same on the upper front of each of the hind legs; some traverse whitish streaks on the back and sides; half-a-dozen spots of same colour on each thigh, with half band over upper portion of the nose under eyes; tail long and tufted. Females, smaller in size, light red in colour, with numerous white spots along the sides; about a dozen well marked even traverse stripes over back and sides. Horns of male widely annulated and scarcely distinguishable from those of the Nakong* (Tragelaphus spekei), *averaging about 22 inches. Females hornless. Spoor resembles the two other varieties of Bushbuck, about 2¼ inches in length.*]

This is the largest of the true South African Bushbuck, its range being now limited to the dense bush of a few of the coast districts of Zululand and about Delagoa Bay, being everywhere there very scarce. It is, however, said to be more plentiful in the independent native territories of some of the maritime regions North of the Limpopo. Its habits and characteristics are almost identical with those of the smaller variety (*Tragelaphus sylvaticus*) found in the Cape Colony, and it bears an equal reputation for savageness of disposition.

The Nakong *or* **Sitatunga** (*Tragelaphus spekei*). Fig. 31, Plate VIII.—(*Waterskaap* of the Emigrant Boers; *Nakong* of the Bechuanas; *Sitatunga* of the Barotse, Makobas, and Masieuvias.)

[*Height of adult ram about 3 feet 7 inches. Body thick set; the young, soon after birth, are very dark in colour, almost approaching black, and striped traversely in a similar manner to* T. scriptus, *but according as the animal advances in age these stripes become more and more indefinable until completely lost on arriving at maturity; hair of adults is very long and woolly in texture. General colour, dusty umberish brown, approaching white underneath and inside legs and shins; brown white spot on each cheek, and white band across nose under the eyes; the hoofs, very much elongated, sometimes exceed 6 inches in length, being totally devoid of hair behind up to the dew claw. When very young the animals stand on the points of the hoofs. Horns almost indistinguishable in shape from those of the Inyala, being more closely annulated, however, sometimes attaining a length of 2 feet, but averaging 21 inches. Females hornless.*]

In the sole companionship of malaria, mosquitoes, water fowls, and noisome reptiles, this antelope, individually or in pairs, is only found South of the Zambesi, frequenting the impenetrable swamps and dense papyrus beds of Lake 'Ngami, the Okavango, Tamulakani, Mababe, Maschabe, and Chobe Rivers. It is also said to be met with along some of the great lakes of Central Africa. Never venturing on the mainland, it is only during the hours of darkness that it forsakes its watery haunts, and passes the night time in repose on the drier ground of some small island overgrown with thick reeds or dwarf palms, returning again before dawn to the fastnesses of the morass, where, during the day, it feeds on the young sprouts of aquatic vegetation. Owing to the disproportionate length of the hoofs, as observed in the only living specimen as yet obtained, and which is now located in the Zoological Gardens, London,* the

* The specimen referred to—a female—was found by the dead body of its dam, which was shot by Mr. J. A. Nicolls (one of the authors) in the Taohe swamp, 40 miles North of Lake 'Ngami, and was by him presented to the Zoological Society in the latter part of 1890. An account of the circumstances under which it was found and brought to England appeared in the *Field*, 1st March, 1891. The antelope at the time of going to press (July, 1892) was in excellent health and condition.

Plate V.

Fig. 15.—The Oribi (*Nanotragus scoparius*).

Fig. 16.—The Bushbuck (*Tragelaphus sylvaticus*).

Fig. 17.—The Gemsbuck (*Oryx gazella*).

Fig. 18.—The Klipspringer (*Oreotragus saltator*).

progress of this antelope on hard ground is extremely awkward and laboured. Their formation, however, enables it not alone to tread with ease the network of papyrus roots and treacherous quagmires in which it resorts, but also to swim with great strength and rapidity. Although not possessed of the diving and other wonderful capabilities attributed to the species by Major Serpa Pinto in his story of African adventure, it will, on being pursued in canoes, often conceal itself by submerging the entire body, the nostrils only being exposed above the surface of the water. From the foregoing remarks it may readily be conceived that any attempt to shoot the Nakong is attended with circumstances of the most extreme difficulty; and it is only under very exceptional conditions that the opportunity for a shot can be obtained. Mr. F. C. Selous mentions in his book that, although he often tried hard, he never even obtained a chance of securing a specimen alive or dead. Anyone whose wanderings in the Interior of South Africa bring him to the country frequented by this animal, and whose ambition as a sportsman prompts him to endeavour to obtain one of these very rare antelopes, is strongly recommended not to make the attempt on foot, but to hire a canoe from some of the petty chiefs of the Makoba or Masieuvia tribes, and in one of these take up a position with his rifle close to the channels of open water in the reeds. A windy day should be chosen, and the reeds—which, when withered and dry, are highly inflammable—set on fire. The Nakongs, if present, will, on the approach of the flames, endeavour to escape across the open channels from one patch to another, possibly giving the venturesome sportsman a chance of a shot. The flesh is exceptionally rank and almost uneatable to a white man.

The Palla (*Æpyceros melampus*). Fig. 3, Plate I.—(*Rooibok* of the Dutch; *Pala* of the Bechuanas; *Impala* of the Matabele.)

[*Height of adult male about 3 feet 3 inches. General colour bright reddish brown, darker above; belly white; the tail about a foot long, white at extremity, with brownish streak down the middle. Horns very graceful but irregular in growth, lyrate, broadly annulated, averaging 16 inches from point to base; some, however, measure as much as 21 inches from point to base. Females hornless. Spoor about 2½ inches, heart-shaped.*]

It is now only on rare occasions that the Palla is found in the countries of the independent natives of the Bechuanaland Protectorate. A few herds still linger in the Transvaal along the Crocodile. Almost exterminated in the regions through which the North-west tributaries of that river flow, it is only when the Zambesi is reached that the Palla is again to be frequently met in any number, which they are at almost every place near its margin. On the Chobe River it is still fairly common, being unknown on the Botletle, but it is only after passing the shores of Lake 'Ngami, and reaching the densely-wooded banks of the Taohe that the species again makes its appearance in a Westerly direction. In those parts of Mashonaland and Matabeleland where not subject to continual persecution, it is fairly numerous. The Palla is highly gregarious, and frequents the thick forest-clad banks of rivers, from which it never strays except after periods of heavy rains, and then only when the pans and *vleys* (which are always dry during the greater portion of the year) are for a time filled with water. In remote parts not very much frequented by man, the herds often exceed a hundred in number. Where not continually disturbed, this antelope, so elegant and graceful of motion, is not by any means shy when approached, generally running but a short distance, and then standing and looking back again, a habit which easily permits of its being stalked. Its flesh is palatable.

The Lechwe (*Kobus lechee*). Fig. *22*, Plate VII.—(*Ledgwee* of the Bechuanas, Makobas, and Masieuvias.)

[*Height of adult male about 3½ feet. General colour, reddish yellow, darker and more red along the back of neck, back, and over rump, paleing on the flanks; throat, breast, belly, and inside of legs pure white; front of fore and portion of hind legs dark chestnut; hair curling on back of neck; tail short, with slender tuft at end tipped with black; back portions of feet, as far up as the dew claws, are, like the Nakong, totally devoid of hair. Horns average about 2 feet along the curve, being similar to the Waterbuck, but more slender, curving forwards, and closely annulated to within a third of the tip. Spoor about 2¾ inches, heart-shaped and oblong.*]

The Lechwe is first found on the road to the Zambesi where the Botletle River on its Eastern course overflows portions of

the Masarasara Flats, creating the vast marsh which is marked on most maps as Lake Kumandau. The species is still plentiful, and may often be met with in large herds on the swampy margins of the Mababe, Tamulakani, and Chobe Rivers. At one time common at Lake 'Ngami and in the great marshes of the Okavango, of late years the Lechwe has become very scarce in those localities. Although not actually living in the water like the Nakong, it is never met with out of sight of it, and is usually observed wading in the flooded plains or cropping the rank grass and sprouting reeds on the alluvial land from which water has recently receded. Owing to their being constantly persecuted by natives for the sake of their skins, which are held in greater estimation for karosses than that of any other antelope, they are extremely shy, and will not permit of approach nearer than 600 yards before running off, which they do at a bounding gallop, often jumping high into the air like the Springbuck, the nose at the same time being thrust forwards and downwards. During some of the winter months large herds, composed entirely of rams, associate together; and as this is the period when the inundations usually occur, large areas of the country being submerged, the Makobas and Masieuvias gather in force and endeavour to drive the herds into the deep water, thus forcing the animals to swim. They are then surrounded on all sides by canoes, from which they are slaughtered in numbers with the assegai. The flesh is somewhat better flavoured than that of other varieties of water antelopes.

The Pookoo (*Kobus vardoni*). Fig. 30, Plate VIII.—(*Pookoo* of the Masieuvias.)

[*Height about 3 feet 3 inches. Hair long and coarse, curling on the back of neck and down spine. General colour, light red, inclined to orange, darker above, the white portions being more tinged with yellow than the Lechwe. Horns resemble those of Reedbuck, not, however, curving forwards so much as in that specimen, the average length being 14 inches along the curve. Females hornless. Spoor 2½ inches, similar to Reedbuck.*]

In the portions of Africa treated of in this volume, this extremely rare antelope is only found in one or two places about the confluence of the Zambesi and Chobe Rivers. Its habits and resorts are

almost similar to those of the Lechwe, not, however, being such a water-loving animal as that variety. Although it never strays any distance from water, it does not appear to enter it except when pursued, confining its pasturage entirely to the dry land. The flesh is very rank.

The Waterbuck (*Kobus ellipsiprymnus*). Fig. 12, Plate IV. (*Kring-ghat* of the Dutch; *Tumogha* of the Bechuanas; *Li Tumogha* of the Matabele; *Mashigi-gig* of the Makobas and Botletle.)

[*Height of full-grown male often considerably more than 4 feet. Body very thick set; legs and neck short and powerful; hair, most abundant about the neck, long, very coarse, of a uniform colour of grizzly brownish grey; very distinct large white ring extends over tail and round lower portion of rump; semi-collar of white under chin; streak of white below each eye; tail slender, rather short and tufted. Average length of horns about 27 inches, but sometimes attaining to 31 along the curve, lyrate, broadly and boldly annulated almost to tips, greyish-brown. Females hornless. Spoor 3¾ inches, extremely narrow in comparison with other species, and very pointed.*]

This fine game-looking and stately antelope is now only rarely met with in some of the unfrequented districts on the Northern confines of the Transvaal in the neighbourhood of the Crocodile, and more occasionally in the low country towards Delagoa Bay. On the upper banks of that river and some of its tributaries it is still fairly abundant, as also in portions of Mashonaland where not recently driven out. In the sparely visited countries of the independent native tribes bordering the East Coast, between the mouths of the Zambesi and Crocodile, as also in the broken country along the Zambesi itself, and most of the streams of Northern Matabeleland, it is still very plentiful. West of the Crocodile, the Waterbuck is first found in the bush country lining the Botletle, Tamulakani or Tumoghanokani, Okavango and Chobe Rivers. It may be met with in small herds (generally composed of one old male and the rest females) either in flat or broken country, but it generally frequents the latter, being invariably found within easy reach of water, to which it will always head and enter when pursued; or if wounded

and hard pressed it takes refuge in any thick reed-beds which may be close at hand. Although a decidedly heavy and short-legged animal, it will gallop through the most irregular and precipitous ground with great speed and activity, and is one of the most dangerous of all South African antelopes to approach when wounded. The flesh is unfit for white men, and is so rank that only hungry natives will eat it.

The Hartebeest (*Bubalis caama*). Fig. 13, Plate IV.—(*Hartebeeste* of the Dutch; *Khama* of the Bechuanas; *'Ama* of the Masarwas.)

[*Average height about 4 feet. General colour, reddish brown, with violet tinge throughout; dark plum-coloured saddle-patch, commencing at point of shoulder, extends over entire surface of back and ends in root of tail; similar patch continues over each shoulder, downwards as far as knees, and front of shin bones of fore legs; pale yellowish patch on cheeks of rump; front of face, which is very long and narrow, almost black, as is a stripe down back of neck. Horns about 15 inches from point to base, varying considerably in size, thickly knotted at base, curving obtusely forwards and then as acutely backwards at a sharp angle. Female has horns which are more slender. Spoor 3½ inches, shaped very much like Koodoo, but considerably broader at heel in proportion.*]

The Hartebeest is not found in the Cape Colony proper, except, perhaps, on a couple of preserved farms. A few troops still linger on the North-west borders of Griqualand West, in the Hay and Barkly West districts, where, however, they are protected for a period of three years. In the Western portions of Bechuanaland, and particularly in the neighbourhood of Hoening Vley and the lower Molopo, they are fairly plentiful, as well as through the independent native territories in the Bechuanaland Protectorate on the verge of the Kalahari, and the North-western districts of the Transvaal bounded by the Crocodile River. In the heart of the Northern Kalahari, on both banks of the Botletle River, and as far up as the Mababe Flats, as well as in Great Namaqualand, it is still, in places, extremely numerous, and may often be met with in large herds. The species is now rather uncommon in Damaraland, and is unknown in Eastern Matabeleland or Mashonaland. The Hartebeest generally associates in herds of

about a dozen, but they may still often be met with in troops exceeding a hundred. Next to the Tsessebe it is the fleetest and most enduring of the larger antelopes of South Africa, and with its long striding gallop is always able to keep its distance in front of the best shooting horse in a tail-on chase. It is not, however, a very difficult animal to shoot, as in making off it will invariably head dead up against the wind, and thus give easy opportunities for cross-cutting. Moreover, it is rather stupid, and a bullet fired so as to strike the ground somewhere in advance of a retreating herd will either turn them back in the direction of the shooter, or bring the lot to a standstill, in which position they will often remain in amazement until the pursuer gallops up close at hand. If the couple of old males that generally head the herd can be shot or otherwise separated from the main body, the remainder appear to become utterly bewildered, and will start running in circles, instead of making off in any particular direction. The Hartebeest is never met with in very thick bush or hilly country, but frequents either the bare open flats or plains sparsely covered with camel-thorn trees (*Acacia giraffæ*), and where there are treeless glades to be met with. It is capable of existing for lengthened periods without water, but in a much lesser degree than the Giraffe, Eland, or Gemsbuck, and may sometimes be seen, in the driest seasons, in the very heart of the Kalahari devoid of permanent water. The females, when heavy with young, drink regularly. It may be worth mentioning that the brain cavity of this species is situated high up, almost between the base of the horns, and several instances could be cited where these antelopes have been killed outright by the simple concussion sustained through the bullets striking the horn. Standing so much higher at the shoulder than at the rump, the general appearance of this antelope is very ungainly. The flesh is fairly good.

The Lichtenstein Hartebeest (*Bubalis lichtensteini*). Fig. 14, Plate IV.—(*Konze* of the Masieuvias; *Inkulanondo* of the Mashonas.)

[*In size and shape resembling the foregoing, but has several distinguishing marks. Colour much lighter, of a uniform saffron, with a golden tinge throughout; patch on forehead and down centre of nose, as also saddle patch extending from point of shoulder to root of tail,*

not being much deeper in colour than rest of body; front of shin bones, including knees, of a dark rich plum; head rather shorter and forehead broader than the Hartebeest. Horns shorter and flatter at the base, and not so obtusely bent forwards. The females are horned, but more slender. Spoor slightly larger, but same shape as Hartebeest.]

This antelope is only met with South of the Zambesi in some of the countries in the direction of the East Coast between that river and the Crocodile. It is plentiful in Umzeila's country and the neighbourhood of the Eastern course of the Sabi, and is in every respect similar in its habits to its congener (fig. 13, plate IV.)

The Blue Wildebeest (*Cannochœtes taurinus*). Fig. 8, Plate III.—*Blaauw Wildebeest* or *Brindled gnu* of the Dutch; *Kukon* of the Bechuanas; *In-kone-kone* of the Matabele.)

[*Height of adult male about 4 feet 3 inches. General colour, bluish grizzly, blackish brown in places, approaching to slate, striped with obscure darker coloured vertical bands; body slopes away towards rump; mane heavy and bristling, extending considerably down back; brisket and under portion of tip covered with shaggy development of hair; tail long, black, flowing, resembling that of a horse. Horns spreading from 20 to 26 inches, points bending upwards and sharply inwards, those of the cow being considerably smaller. Spoor 4 inches, heart-shaped, broad at the heel and rather blunt at the points of hoofs.*]

The Blue Wildebeest (by which name it is generally known throughout South Africa) is, practically, extinct in the Cape Colony and the Orange Free State. It is now only first met with in its most Southern range on the lower borders of the Kalahari, through which the Molopo River flows in its most Western limits, a few troops, last year, straying Eastward to within thirty miles of Mafeking, in Bechuanaland. Along the Western borders of Kanya, Sichele's country, and in the heart of the Kalahari, it is still fairly plentiful. In the Lake 'Ngami districts on both banks of the Botletle River, and from thence right up to the Chobe and Zambesi, it is quite common in suitable localities, and, at the present time, large troops may be seen on the Ma-Chara-Chara and Mababe Flats, and the country surrounding the great salt-pans of Makari Kari, through which the main road passes to the Victoria Falls. In some

portions of Matabeleland it is also plentiful. In the Transvaal, except in some of the Northern districts along the Crocodile River, it is very scarce, being extremely numerous, however, in the low country about the Sabi and Busi Rivers. Although large herds of Wildebeest may frequently be observed grazing together on the same plain in close proximity, it is now unusual to find one exceeding fifty in number. Occasionally an old bull will separate from the remainder of the troop and adopt the companionship of some other description of game, preferably Quaggas or the Ostrich, and with which they appear to associate on terms of the greatest harmony. In appearance this antelope is very strongly suggestive of the American bison on a smaller scale, but their heavy, clumsy, and ungainly appearance belie their capabilities for speed, as they will run with considerable swiftness and great endurance indifferently either up or down wind. When pursued they gallop in single file, the cows in the van and the old bulls in the rear, performing the most peculiar antics imaginable. Of a wandering and restless habit, they do not frequent any particular spot for any lengthened period, but are invariably on the move in their migration from one resort to another. Like the majority of the other larger antelope of South Africa, the Wildebeest is, at the present day, always hunted on horseback, and the question of successful chase depends less on stratagem than on the speed and stamina of the hunter's horse, and his own accuracy of aim. They frequent open flats, but may often be met with in thickly wooded country, never approaching water except at night. The flesh is only suitable for *biltong*, and is very coarse.

The Black Wildebeest (*Cannochœtes gnu*). Fig. 25, Plate VII. —(*Zwart Wildebeest* of the Dutch.)

[*Height of adult male about 3 feet 10 inches. General colour, deep umber brown, verging to black; neck thick and arched, surmounted by upright mane of slate-coloured coarse hair; upper part of face, dewlap, chest, and portion of belly covered with bushy, brownish black hair; rump sloping and assinine; eyes fierce; legs slender; tail long and white. Horns along curve, about 20 inches, branching downwards, slightly outwards, turning abruptly upwards, forming a complete hook. Females with horns, but more slender. Spoor 3½ inches, narrow, heart-shaped.*]

Plate VI.

Fig. 19.—The Tsessebe *(Damalis lunatus)*.

Fig. 20.—The Springbuck *(Gazella euchore)*.

Fig. 21.—The Eland *(Oreas canna)*.

This strange, spiteful-looking antelope, like its congener the Blue Wildebeest, is now almost extinct in the Cape Colony, except on a few preserved farms in Victoria West, and it is unknown North of the Orange and Crocodile Rivers. Its habits are very similar to the species above mentioned, being, however, whimsical and extremely ungainly, and presenting an appearance of ferocity which it does not possess. As it evinces an abundance of curiosity, and is not by any means shy or timid, it is easily shot. The Black Wildebeest is gregarious, and frequents open plains sometimes remote from water. Flesh coarse and unpalatable.

The Gemsbuck (*Oryx gazella*). Fig. 17, Plate V.—(*Gemsbok* of the Dutch; *Kukham* of the Bechuanas; *Kau* of the Masarwas.)

[*Height of adult male about 4 feet, occasionally larger. General colour, fawnish grey; dark brown patches on arms under shoulder, continuing direct along the flanks over white of belly; lower portion of haunch patched similarly; face, brown and white, alternately striped lengthwise; narrow brown stripe extending from throat down centre of neck as far as breast; body very stout; neck particularly thick and powerful; tail long and coarse. Horns average 3 feet 2 inches, sometimes attaining 3 feet 6 inches, straight, round, tapering, well annulated. Horns of female longer, occasionally reaching to 4 feet, being much narrower at base than those of male. Spoor, slightly under 4 inches, heart-shaped, rather blunt at the points of hoof.*]

Herds of this antelope are only found in the far recesses of the Kalahari where there is no permanent surface water, the only approachable portions of this district which are frequented by the species in dry seasons being in the angle formed by the Botletle River, where, after following an almost due Easterly course, it bends sharply to the South. Northward of that river, and as far up as the Mababe Flats, and around the great salt-pans, it is also still rather plentiful. The Gemsbuck never approaches permanent water-courses, and it is only after heavy rains, when the *vleys* are filled, that it ever drinks at all. There is, however, a species of wild water-melon, resembling a cucumber, which grows luxuriantly in sandy places, even in the very driest season, and this

antelope, in common with the Eland, partakes of it largely. From the fact that there has been for more than one year a total absence of rain in the Kalahari, or at least quantity in sufficient to be retained on the surface of the soil, and when from some unexplained cause the melon crop referred to has often failed entirely, it is tolerably certain that this antelope is capable of existing without water, at least for many months. It has been argued that in the absence of this melon the Gemsbuck and Eland find a substitute in a certain large white-coloured juicy root, resembling in size and shape a Swede turnip, but this explanation is scarcely tenable, for, although such a tuber undoubtedly exists, it is invariably found so deeply engrafted in the soil as to make it quite a matter of impossibility for any antelope to uproot it, no matter what the formation of its horns or hoofs may be. A great many stories have been told in the past by famous hunters and travellers as to the beauty, ferocity, and wonderful fleetness of this antelope, but whether the Gemsbuck of the present day has deteriorated or not, it certainly is not in the possession of these qualities in any marked degree. Its horns are unquestionably fine and its face prettily marked, but in other respects the general appearance of the animal is heavy and unimposing. When wounded or brought to bay, it will no doubt defend itself with vigour and desperation, using its formidable horns with such effect as to deal immediate death to any dog which rashly approaches it, but otherwise its ferocity does not by any means equal that of the Roan Antelope or Waterbuck. In regard to speed, it will keep in front of the ordinary shooting horse for a short distance; but, taking it all round, it is, perhaps, one of the easiest of the larger antelope to gallop up to, and can in no respect equal the Giraffe, Hartebeest, Wildebeest or Tsessebe for fleetness or endurance. Its flesh is very fair.

The Sable Antelope (*Hippotragus niger*). Fig. 5, Plate II.—(*Zwaart vit-pens* of the Dutch; *Kualata Inchu* of the Bechuanas; *Umtigele* of the Matabele.)

[*Height of full-grown bull seldom exceeds 4 feet 6 inches. General colour above, very dark shining brown, being almost black in some individuals; belly and under portion of stern pure white; forehead and upper portion of face dark brown, a white stripe commencing over both eyes and extending to nose, followed underneath*

by another of light brown; chin and beneath white; mane, brownish and black, long and standing; tail black and long. Horns average a little more than 3 feet, but are known to occasionally attain to 3 feet 8 inches, scimitar-shaped, arched backwards, and well annulated. Females have smaller horns. Spoor 3¾ inches, heart-shaped.]

THE range of this magnificent and imposing antelope (which is occasionally called the Harrisbuck after its discoverer Captain W. Cornwallis Harris) does not, as a rule, extend Westward of the road passing the Makari Kari salt-pans and Pandamatenka to the Victoria Falls. An odd stray herd may, however, be occasionally met with in the vicinity of the Chobe River. In portions of North Matabeleland it is still common, as also in such parts of Mashonaland where it has not been driven away through the exploitation of that country by the British South Africa Company. In the low districts of the East Coast it is very plentiful. It occasionally associates in herds up to fifty, but usually in groups under twenty in number, in which only one old male is to be found, the remainder being cows or young males. When not over fat, it is a matter of difficulty to run it down on horseback, and is a dangerous animal to closely approach when wounded. The flesh is excellent.

The Roan Antelope (*Hippotragus equinus*). Fig. 7, Plate II. —(*Bastard Ehland* of the Dutch; *Kwalata* of the Bechuanas; *Etaka* of the Matabele; *Kwar* of the Masarwas.)

[*Height of adult male about 4 feet 8 inches, but some specimens have measured fully 5 feet. General colour, light grizzled reddish grey, changing very much in hue according to the locality found; fore part of face and chin, and semi-circular patch over eyes, white; black patch on forehead and cheeks, extending a short distance down neck; belly and front of each thigh, white; dark stripe down centre of lower portion of chest, and patch of same above knee-joints of fore legs; thin stiff mane, terminating near hollow of back, almost black; large tuft of wiry hair under neck. Horns average 2 feet 4 inches on the curve, sometimes attaining 2 feet 9 inches, placed almost above eyes, scimitar-shaped, round, fully ringed. Females horned. Spoor 4 inches, heart-shaped, and broad at heel.*]

This fine looking antelope is now very rarely found on the upper and lower banks of the Botletle River, about the Mababe Flats, Great Makari Kari salt-pans, and Chobe country. In the less frequented portions of Matabeleland it is still fairly common, and although once plentiful in Mashonaland, it is now almost driven out of that country through the influx of prospectors, being, however, very numerous in the low country towards the East Coast. The Roan Antelope is usually found in troops numbering from six to twelve, and chiefly resorts to countries abounding with low hilly ridges. Although its appearance when galloping is very heavy, it can nevertheless get along with rapidity; and possessing considerable endurance, in this respect it far exceeds the Gemsbuck. It is of a particularly shy disposition, and when grazing, every now and then raises the head, looking around in every direction as if in constant expectation of danger. When wounded it is the most dangerous of all African antelopes, and if hunted hard will often turn and charge furiously, even when uninjured. Its powers of scent are particularly strong, and on detecting the slightest breath of "tainted" air it will at once start running. The flesh is fairly good.

The Koodoo (*Strepsiceros kudu*). Fig. 1, Plate I.—(*Kudu* of the Dutch; *Tolo* of the Bechuanas; *Le-bala-bala* of the Matabele; *Noro* of the Mashonas; *Unskwa* of the Makobas).

[*Height of adult male often 5 feet. General colour, bluish rufous grey; two or three white spots on each cheek, together with white bands on upper portion of nose immediately under eyes; pale stripe down spine, from which half-a-dozen indistinct white bands branch downwards towards belly, being more definite in those found in the Zambesi regions than those further South; ears extremely large and prominent; tail tipped with sable. Horns average 3 feet, sometimes attaining to 3 feet 10 inches, bulky, spiral, wrinkled at base. Females hornless. Spoor 3 inches, heart-shaped, rather narrow at heel.*]

It is pleasing to state that, notwithstanding the continual persecution by both natives and white men, this majestic and graceful antelope is still to be widely found in favourable localities, and is plentifully distributed almost throughout South-central Africa. The day is past, however, when it can fairly be included in the list of the

wild game of the Cape Colony proper, the Orange Free State, or Natal, as in those countries it is preserved on only a few farms in a semi-domestic state. At the moment of writing some few troops still linger in the Northern portions of the Transvaal, and also in the thick bush of the lower Molopo in Bechuanaland, and the Western end of the Machapong range in the Bakwaina country. Since Khama (the chief of the Bamangwatos) changed the residence of his people about two years ago to Palapye, the Koodoo is again resorting in scattered troops to the hills surrounding the old town of Shoshong. Three years ago plentiful in the bush on both banks of the Crocodile River in its North-western course, it is now almost driven out from this latitude by the advance of civilization. In some portions of Mashonaland and Manicaland, throughout Matabeleland and the Zambesi districts, as well as in the regions of Lake 'Ngami, it is still perhaps the most common of the larger antelopes. Ornamented with its magnificent spiral horns, the beautiful head erect on a symmetrically formed and stately body, the bull Koodoo, if not the largest of its genus, certainly has an air of nobility and independence far greater than that possessed by any other antelope in the world. The species is gregarious, a troop generally averaging six and rarely exceeding twenty in number, being sometimes composed wholly of males, and at other periods entirely of females. Of an extremely shy and timid nature, the Koodoo during the daytime frequents the dense thorn-bush thickets, or the wooded slopes and eminences of stony *kopjies*, generally, but not always, somewhere in the vicinity of permanent water, wandering long distances during the wet season from its usual haunts from one rain pool or pan to another. In unfrequented localities, and particularly during the early hours of the day, herds may occasionally be seen grazing on open flats; and when come upon under such favourable circumstances, they can be galloped up to on horseback without much difficulty, as, although capable of darting in and out through the most inaccessible bush with astounding celerity notwithstanding the weight and length of the horns, their gallop in the open is clumsy and slow. In following up the spoor (which, considering the dimensions of the animal, is extremely small) in cover, on foot, the utmost stealth and caution should be observed, as the Koodoo is provided with an exquisite sense of sight, hearing, and scent; and its body, although large, is extremely difficult to distinguish in the dense thorn-bush, which is

very similar in colour to the skin of the antelope itself. Its movements are so rapid and noiseless that at one moment it may be observed and the next have disappeared without the slightest sound. The hide is very endurable and much sought after by wagon drivers, who make it into *voorslag* (leashes) for ox whips. The flesh is particularly good, and the marrow bones are specially recommended as a luxury.

The Eland (*Oreas canna*). Fig. 21, Plate VI.—(*Ehland* of the Dutch; *Pohu* of the Bechuanas; *Impohu* of the Matabele; *Mohu* of the Mashonas; *Doo* of the Masarwas.)

THE appearance of this animal, the largest of all known antelopes, whether in Africa or elsewhere, has so often been described and portrayed, that a few remarks on the subject will be sufficient. The Eland bull of the Kalahari often stands 6 feet at the shoulder, and occasionally exceeds that height. Further North it considerably decreases in size, and changes greatly in colour; so much so that Mr. Selous says that the Elands shot by him North of the Zambesi "are beautifully marked, having nine broad white stripes on each side, and a dark black line down the centre of the back." This is the Eland which Dr. Livingstone has described, and which has been by some considered an entirely new variety. Indeed, Colonel Faddy, R.A., who had the good fortune to shoot several specimens of this particular type when in South Africa, was generally discredited after he had specifically referred to its characteristics, until he produced their skins in verification of his statements. Those found on the South of the Botletle bear no such white marks as those above referred to, but are of a uniformly bluish-grey dun colour, while those frequenting the Northern banks of that river are marked more or less indistinctly. The foreheads of the old bulls are adorned with a thick tuft of wiry brown hair; the dewlap is excessively prominent and fringed with long hair of a deep brown colour; tail over 2 feet in length, with a tuft of hair at the extremity, its general appearance being very characteristic of a stall-fed ox. Horns of the males average a little over 2 feet, occasionally measuring 30 inches, massive, nearly straight, spiral. Those of the females are more slender, averaging about 28 inches, sometimes attaining to 34 inches, divergent and twisted. The spoor is difficult to distinguish from that of a three-year old ox, except that on examination the points of the hoof will be found to

be pressed together on the ground without leaving any intervening mark. The Eland still frequents the interior of the Kalahari, and roams in herds in those portions which are inaccessible to the hunter, except during a short period after rains. In all that large belt of almost waterless country stretching from Reitfontein, on the borders of Damaraland, to the old wagon road from Shoshong to the Botletle, it is to-day common, seldom, however, approaching nearer than twenty miles of the banks of that river. From a short distance North of the Botletle, right up to the Chobe, and in the country between the latter river and the Zambesi, it is also plentiful, but in places difficult of access. In a few favoured districts of Matabele-land, and particularly in Lobengula's own preserve, it can be found, but is now almost driven out of Mashonaland. The Bushmen—for the more ready discovery of the different edible roots on which, in the absence of meat, they principally subsist—are in the habit during the dry seasons of the year of burning off the long withered grass from the surface of whole districts, which causes the Eland to constantly wander to and fro in search of the young grass; and which, unassisted by rain, in a very short time after such conflagrations begins to sprout. In conjunction with this young grass and the wild melon, the antelope derives a considerable amount of moisture. Although it is an exceptional circumstance to find the bulls drinking at the rivers or permanent *vleys*, the cows, however, when heavy in young, constantly do so when possible, and it is to them a matter almost of necessity when in such a condition to imbibe a more than ordinary supply of liquid. The Eland is much more partial to forest-clad rolling sand belts than to sparsely wooded open flats, and may usually be found herding in the mopani bush, to the leaves and young sprouts of which, like the Giraffe, it is extremely partial. When excessively fat (which they generally are), this antelope on being hunted on horseback, and if hard pressed from the start, will get winded and tire rapidly; but, on the other hand, when in poor condition, and more especially in the case of the cows, they can get along with most unexpected rapidity and endurance—in these respects equalling if not excelling the efforts of the Gemsbuck. The first symptoms shown by an Eland of being "pumped out" when pursued is when it breaks from a gallop into the trot (see remarks on Large Game, page 17). The flesh is greatly relished, and possesses a large amount of fat, which is in the main absent from other ante lopes.

The Damaraland Antelope (*Nanotragus damarensis*).

[*Height about 22 inches. Colour of back finely grizzled with black and yellow, replaced by grey, all the hairs being distinctly ringed with black, the predominant grey colour of the rump and outer side of the thighs being a distinguishing mark from other species; skin of forelegs bare of hair. Horns of adult male 2¾ inches long, with prominent irregular ridges, about seven in number, circling the base. Females similar in colour but hornless.*]

For the above description of this practically unknown species we are indebted to Dr. A. Günther, F.R.S., who first brought it to the notice of the scientific world in the *Proceedings* of the Zoological Society of January, 1880. Mr. Ericksson, the well-known Damaraland hunter and companion of Andersson, presented the first male specimen to the Capetown Museum; and he states that it frequents the rocky hills in the vicinity of Omaruru, in Damaraland, about 1° North of Walfish Bay, but it is very hard to obtain in consequence of its wonderful agility, its inaccessible haunts rendering the difficulty much greater.

The Triangulated-horned Antelope (*Antilope triangularis*). —Fig. 37.

If this species of antelope ever existed, it owes its discovery in the first instance to Mr. Moreton Green, of Natal, who submitted a pair of horns to Dr. A. Günther, F.R.S., the keeper of the Zoological Department of the British Museum, by whom the supposed new variety was prominently brought to public notice in the *Proceedings* of the Zoological Society of February 19th, 1889, whose remarks are based on the horns above alluded to and a small portion of the skull which was attached to them. Mr. Green stated that he obtained this specimen many years ago through the instrumentality of a hunter who was trading for him in the Zambesi regions. This man had told him that he had bartered the horns from a native chief, who in turn said the animal was exceedingly scarce. Dr. Günther says: "The horns are evidently those of a very old animal . . . gently curved backwards, showing the slightest indication of a twist near the top; they measure 31 inches along the curve, and 30 in a straight line from the base to tip. The distance of their ends is 22 inches. A transverse section taken 3 inches from

Plate VII.

Fig. 22.—The Lechwe (*Kobus leche*).

Fig. 23.—The Reed Buck (*Cervicapra arundinum*).

Fig. 25.—The Black Wildebeest
(*Connochætes gnu*).

Fig. 24.—The Rhebuck (*Pelea capreolus*).

Fig. 26.—The Duiker
(*Cephalolophus grimmi*).

Fig. 27.—The Bontebuck (*Damalis pygarga*).

their base would represent a triangle . . . Of the known genera of antelopes, none approach this singular type more nearly than the *Tragelaphus*. *Tragelaphus* has, likewise, horns trihedral in shape at the base, and, if we imagined the longitudinal axis of the horns of our specimen twisted outwards, a form of horn would be produced which could not be separated from *Tragelaphus*. And there is no doubt that the ancestral form of *Tragelaphus* must have resembled or been identical with our type. But without being acquainted with the cranial, dental, or other characters, it would seem to me premature to offer an opinion as to its generic relations, or even to give a distinct generic term, much as the shape of the

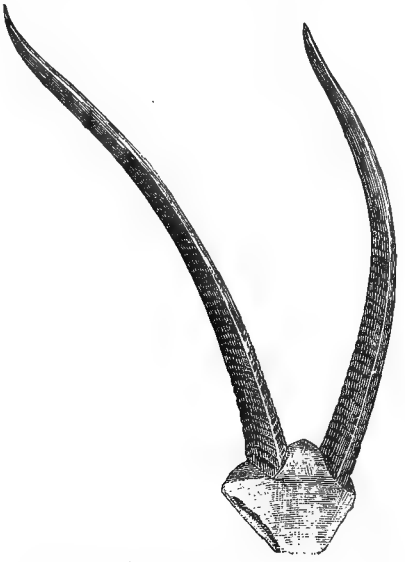

Fig. 37.—The Triangulated-horned Antelope (*Antilope triangularis*).

horns differs from that of all other known antelopes. It therefore seems to me to be sufficient to distinguish it for the present as a species of *Antilope* in the Cuvierian sense, viz., as *Antilope triangularis*." In addition to Dr. Günther's remarks, it may be interesting to observe that five years ago Mr. H. Boyne (a well-known trader in Sichele's country) had a pair of horns almost exactly resembling those above described, and from whom they came into the possession of one of the authors, but it is regrettable that they were subsequently mislaid. Mr. Boyne was unable to state from whence they originally came, but those of Sichele's people who saw the specimen were unanimous in delaring that they at one time adorned the head of a cow Koodoo.

Without going so far as to place any reliance whatever on the report or opinion of any African native, it may be suggested that the specimen in the Natural History Museum and that of Mr. Boyne will both eventually be found to be nothing more than a malformation of the horns of the Koodoo bull. In any case strong argument may be advanced against the *Antilope triangularis* being considered a distinct species. In the first place, even going back for so long a period as twenty years, the antelopes frequenting the Zambesi regions were at least fairly well known, and if one that had not previously been described, and possessing the marked characteristics of that under discussion, had actually existed, it is only reasonable to assume that the many intelligent sportsmen who have visited, and traders who have resided there, would have at least heard and given some report, however meagre, upon such an important subject. It is also well known that African natives of the Interior, after killing a head of game, and cutting up and removing the carcass, invariably leave the horns where the animal originally fell; and these, if only exposed for a short time to the influence of the weather, become completely worm-eaten. On the other hand, those described by Dr. Günther are in a state of almost perfect preservation, and for this reason it may be presumed that they could not have been long removed from the animal to which they originally belonged, before falling into the hands of the trader from whom Mr. Green obtained them. The wider publicity given to these particulars will, we trust, lead to this extremely interesting question being determined one way or the other.

OTHER GAME.

The Elephant (*Elephas africanus*).—*Oliphant* of the Dutch; *Chloo* of the Bechuanas; *Incubu* of the Matabele.

[*The outward appearance of the African Elephant is distinguished from the Asiatic species by the remarkable size and expanse of the ears, the presence of well developed tusks in the females, the formation of the head (the forehead being convex instead of concave), and the possession of only three nails on the hind feet.*]

TWENTY years ago the Elephant was distributed all over the tropical portions of South Africa, in some places in enormous quantities. The advance of civilization, and the introduction of breech-loading rifles among the native tribes, has contributed to their extermination with astonishing rapidity. It is regrettable to state that—with the exception of a few scattered herds which still remain in the most unfrequented portions of Matabeleland, and the extremity of North-eastern Mashonaland—they are now only met with in anything like reasonable quantities in the impenetrable bush of the low-lying coast country in the region of Sofala Bay. A few herds may possibly exist in the extreme North and North-east of Ovamboland bordering on the Cunene and Okavango Rivers; but if so, they are only a few tuskless males or young females. The last herd frequenting the Botletle and the neighbourhood of Lake 'Ngami was completely destroyed three years ago by Moremi's Bechuanas, and although a good many are certainly to be met with in the country between the Chobe and Zambesi, it is improbable that they will survive the attacks of the Barotse natives during the next two or three years. It may be mentioned that the Elephant is preserved by the Colonial Government in some of the forest country of the Eastern provinces of the Cape Colony, but as it is a matter of extreme difficulty to obtain a permit (which, when granted, costs £20 for the right to shoot a single specimen), no one is recom-

mended to avail himself of this opportunity of sport; as, even in the event of the permit being issued, the Elephants are seldom met with.

Previous to the incursions of white men in search of ivory, and the consequent introduction of fire-arms, it was only on rare occasions that the aborigines were enabled by the aid of their rude weapons to make any impression on the tough hide and huge body of the Elephant; indeed, it then roamed the forest with little fear of any living creature. Times changed, and whilst still frequenting in multitudes districts wholly free from the tsetse fly, the white hunters came in on horseback and with their deadly rifles slaughtered thousands with little danger and less fatigue. Those days have passed, and the Elephants, with few exceptions, have been driven into places quite inaccessible to horses. Anyone now desirous of being in a position to say that he has succeeded in "laying low" a specimen of the largest of existing quadrupeds and one of the most dangerous of African game, must be prepared to encounter the brutes on foot, sometimes with nothing to depend upon for escape but his own steady aim, and, may be, the length of his legs, as well as undergoing extreme hardships of many descriptions.

The hunting of the Elephant is an inexhaustible subject to deal with, but it will be sufficient to give a few hints which may possibly be of use to a beginner at this form of sport. Possessed of very bad sight, but with an exquisite sense of smell, no great danger may be apprehended, when the wind is favourable, from creeping right up alongside a single one; but, when there are a lot close together, the case is different, as in the stampede which follows the firing of the first shot, the terrified and confused animals may run right on top and trample the hunter before an opportunity is afforded him of getting out of the way. Owing to the formation of the head and the backward portion of the brain-pan, a shot direct in front is often worse than useless. The concussion may on a few occasions stop a determined charge, but as a matter of fact it more often induces one. When this happens, however, and the trunk is elevated, which leaves the chest completely exposed, a bullet may be planted with deadly effect in the region of the heart; but it must not be expected that an animal when charging will always elevate the trunk and give this opportunity. On the other hand, if a side shot be offered at one which is standing quite still, the brain may easily be penetrated if the bullet is directed true on the outer

edge of the central portion of the ear; but the most vulnerable point of any is the shoulder, for should the heart be missed the bone may be smashed and the animal rendered helpless, and consequently incapable of making away or charging.

Old cows, and especially the "queens" (barren females), will be found more difficult to deal with than the bulls, as they are always ready to charge, even when unwounded, and experienced hunters on finding one in a herd that seems inclined to prove troublesome, will take the precaution of despatching her prior to engaging the bulls, although her tusks may possibly be worthless. An infuriated Elephant, when charging, utters shrill, trumpeting screams in quick succession, and should one of its persecutors have the ill-luck to be overtaken, these are continued until the remains of the unfortunate individual present nothing but a pounded and unrecognisable mass of flesh. In the winter months, when the dense cover (which usually consists of the hack-thorn) is denuded of leaves, and much resembles the leaden hue of the hide of these animals, it is extremely difficult to distinguish one when motionless, no matter how close at hand it may be. Like the Buffalo it often conceals itself when wounded, waiting on its pursuers, who, intent only on tracing the spoor, may unknowingly attain a degree of propinquity to the game not by any means desirable. When the wind is favourable, if an Elephant be startled and gets on the move before a shot can be fired, it can with fair running be headed by the native attendants and driven back towards the guns, a shout from the Kaffirs in advance being generally sufficient to turn a whole herd. Even when on horseback the first rush of these animals cannot always be avoided, but on settling down to their ordinary pace, which is a quick walk, any fair runner can on foot outpace them for a short distance, provided the country is fairly open and the bush not too dense.

Elephants are capable of ascending steep and rugged hills with remarkable ease considering their bulk, and descend with great speed and extraordinary agility. In the tropical portions of South Africa the direction of the wind cannot be depended upon for any length of time, and in this lies the chief difficulty in Elephant hunting. As before remarked, they are able to scent a human being at almost incredible distances, and on feeling the slightest breath of tainted air will instantly start off and keep at a quick pace for hours and hours without halting for an instant. On the other hand, their sight is so wretched that if one were to stand perfectly

still, even out in the open, a whole troop might possibly pass at close quarters without showing the slightest signs of detection; but this, of course, could not possibly happen unless the wind were favourable. The exact direction of the latter can readily be ascertained by simply throwing a handful of sand into the air. Anyone under the impression that the huge spoor of an Elephant can at all times be traced with the greatest facility will, in actual experience, be grievously disappointed. Broken down bushes and grass is evidence easily recognisable of the passing of one, but when these are absent and the spoor leads into hard bare ground, it requires the practised acuteness of the Kafirs to follow it with any reasonable speed. When hunted hard in the great heat of the sun, they can be come up to much quicker than at other times, and one of the surest signs of an Elephant being "dead beat" is when it inserts the trunk into the stomach and, withdrawing it, ejects water all over its back.

An almost nightly supply of water is necessary for the existence of these pachyderms, but it is unusual to find them drinking in the day time; and when the sun is hot they retire into the recesses of the thickest jungle, where they pass the hours standing in sleep. If disturbed at such a moment they are inclined to be far more aggressive than at others. When persecuted for any lengthened period in a particular district, they entirely forsake it, nor do they return to it for perhaps a long time. The flesh is excessively coarse and rank, although all natives hold a contrary opinion. Some portions of the trunk are eatable, while the heart is very acceptable to a hungry hunter. A baked foot was in days gone by considered quite a delicacy, but modern appetites are unable to agree with the tradition.

The Black Rhinoceros (*Rhinoceros bicornis*). Fig. 35, Plate X.—(*Zwaart Rhinaster* of the Dutch; *Borele* or *Keitloa* of the Bechuanas; *Upeygan* of the Matabele.)

[*The black prehensile-lipped Rhinoceros is distinguished from the* R. simus *by its inferior size and strongly projecting pointed upper lip, which enables it the more readily to browse on twigs, leaves, and roots, on which food it entirely subsists; ears short and rounded, tipped with coarse hair; posterior horn much varies in size in different animals, being in some a mere excrescence, and in others developed to*

a length exceeding the anterior, both being round; nostrils round; eyes situated low down and forwards. Spoor exhibits the impression of the three toes pointing almost directly forwards.]

THE general understanding that there were four distinct varieties of Rhinoceros inhabiting South Africa, viz., the *R. simus*, *R. oswelli*, *R. keitloa*, and *R. bicornis*, seems to have been first disputed by Mr. F. C. Selous in a very interesting paper read by him before the Zoological Society in June, 1881, and no matter how opinions may differ, it is now commonly accepted that there are but the two, the Black Rhinoceros (*R. bicornis*) and the White Rhinoceros (*R. simus*), although, most unfortunately, it is believed that the latter has become extinct within the last five or six years. The presumption that there were four varieties was erroneously based on the development and different shape of the horns in individual animals. The range of the Black Rhinoceros South of the Zambesi is limited to the hilly and broken country along that river East of the Victoria Falls, where it is still found rather plentifully. Two years ago it was very common throughout Mashonaland, but is now almost driven out, only being met with in far-away places remote from the prospectors. A fair number still remain in the unfrequented parts of Matabeleland, particularly in the portion which Lobengula calls his preserve; and in the low-lying country on the East Coast about Sofala Bay it is said to be continually come across, a few, perhaps, being still left North of the Chobe.

Blood-curdling stories have been repeated, *ad nauseam*, as to the morose, revengeful, and indescribable ferocity of this Rhinoceros; sufficient, indeed, to deter the most courageous and enterprising spirits from even partaking of a distant view of a country inhabited by such monsters. When truth is separated from fiction, it will be found that these narratives are merely the result of very strong imagination on the part of those who recount them. This animal is possessed of a very limited power of vision but very perfect organs of smell; and the so-called headlong charges attributed to it may generally be presumed to be occasioned more by a confused idea of some danger being at hand, without exactly knowing its direction, and a desire at all hazards to escape from it, than to the actual disposition for devastation and annihilation for which it gets credit. Of course, accidents do and will occasionally occur in encounters with them, but the dangers attending their chase is

comparatively little when compared to that of the Elephant, Lion, or Buffalo; and if one be found charging under severe provocation, it will seldom make a second onslaught should the first fail. By these remarks it is not intended to convey any impression that this Rhinoceros may be attacked with impunity, but it is attempted to show that it is not the ferocious and bloodthirsty animal most travellers and nearly all natives represent it to be. However heavy and ungainly it looks, it can run with most unexpected rapidity, its trot almost equalling in speed that of the Eland, although a fairly good horse can come up to it easily; and when stalking on foot, if the wind be favourable, it can, owing to its deficiency of vision, be walked right up to without difficulty, and a side shot in the region of the heart or through both lungs will quickly prove fatal. If only wounded in one lung, however, the blood spoor may be followed up perhaps for hours without ultimate success. Owing to the difficulty of getting at the brain, a head shot is rarely effective. A solid bullet should invariably be employed.

The Black Rhinoceros is nocturnal in its habits, drinking early in the evening if not disturbed, wandering over large tracks of country during the remainder of the night in search of food, and spending the heat of the day sleeping in the shade of some thick bush, being more partial, however, to a very rugged and broken country. Although not, strictly speaking, gregarious, it is rather of a social disposition, it not being unusual to meet with several in company. It has a peculiar habit of scattering its warm dung in every direction.

The Rhinoceros bird (*Buphaga africana*) is a very constant companion of that quadruped, which, besides preying on the numerous parasitic insects infesting its hide, also acts as a sentinel, on the approach of danger flying into the air and uttering piercing cries. This, together with the rapid flapping of its wings, attracts the attention of the Rhinoceros, which at once precipitately retreats without waiting to ascertain from whence comes the danger.

The White Rhinoceros (*Rhinoceros simus*). Fig. 33, Plate IX.—(*Vit Rhinaster* of the Dutch; *Chukuru* of the Bechuanas; *Umhofo* of the Matabele.)

ALTHOUGH there is every reason to suppose that the White or square-mouthed Rhinoceros is now extinct, it is thought advisable

Plate VIII.

Fig. 28.—The Inyala (*Tragelaphus angasi*).

Fig. 29.—The Grysbuck (*Nanotragus melanotis*).

Fig. 30.—The Pookoo (*Kobus vardoni*)

Fig. 31.—The Sitatunga (*Tragelaphus spekei*).

for completeness to mention the characteristic points that distinguish it from the *R. bicornis*. Why it was ever called "white" it is difficult to imagine, as it was almost similar in colour to the previous variety. It occasionally attained a height of 6½ feet, the head being enormously large in proportion; the ear conch long, the ear itself very much pointed and almost devoid of any appearance of hair on the tips; the nostrils elongated and not round, while the eyes were situated high and far back. From its habits of proceeding with the nose low down, the anterior horn always presented a partially flattened front, caused by continual scraping on the surface of the ground; and specimens have been obtained in which this horn has attained a length considerably exceeding 4 feet. The posterior horn was rarely so much developed as in the case of the *R. bicornis*, and seldom exceeded 3 or 4 inches in length. The mouth was square, betraying no appearance of a projection of the upper lip. The food consisted solely of grasses, and on this account it preferred to frequent a flat rather than a hilly country. The young calves of the *R. bicornis* invariably run behind their mothers when pursued, whereas those of the *R. simus* proceeded in front, the course of the little ones being directed and guided by the point of their parent's horn. The White Rhinoceros was last observed frequenting a small district in North-east Mashonaland, and also in the neighbourhood of the Sabi River. Although the Zoological Society have made every effort to procure a living specimen, they have up to the present been wholly unsuccessful.

The Hippopotamus (*Hippopotamus amphibius*).—(*Zee-kue* of the Dutch; *Cubu* of the Bechuanas; *Imfubu* of the Matabele.)

[*The appearance and characteristics of the Hippopotamus are so well known that it will be sufficient to say the spoor can be easily distinguished from that of the Rhinoceros by its superior size and impress of four in the place of the three toes.*]

It is many years since the last Hippopotamus was killed in the rivers of the Cape Colony, and although some herds are said to exist at the mouth of the Tugela on the East Coast, they are otherwise extinct South of the Crocodile. Eastward of the junction of

that river with the Tuli, however, they may be found abundantly in favourable places, as also in most rivers emptying into the Indian Ocean between it and the Zambesi, which are in character deep or are possessed of occasional deep pools. Stray herds may be met with in the extreme Northern courses of the Guai, Shangani, Umniati, Umfuli, and Hangani Rivers before joining the Zambesi, but owing to the shallow and uncertain character of these streams the natives are rapidly killing them out. In the Zambesi and Chobe they are very numerous, and fairly so in the Botletle and Lake 'Ngami, while in the vast swamps formed by the Okavango North of that Lake, they are extremely common and may be continually found in herds exceeding 20 in number. Only emerging from their natural strongholds during the night to feed, it is quite probable that these animals may be found frequenting the rivers of tropical South Africa long after the Elephant and Rhinoceros have passed away.

If by any chance a Hippopotamus be discovered out of the water, its destruction is easily accomplished, as it will quickly die if struck well on the shoulder; but under ordinary circumstances they are more difficult to kill than any other pachyderm. As boats are generally wanting, it is almost impossible to induce the natives to follow them with their canoes into deep water, they being fully aware of the disastrous results accompanying the attack of one of these beasts when infuriated; and whatever may have been the case formerly, one nowadays seldom hears of natives in canoes, even when armed with rifles, venturing upon an encounter with the Hippopotamus while in its favourite element. Andersson has repeatedly mentioned how the aborigines have, without the least hesitation, attacked these amphibious monsters, armed alone with harpoons and spears; but, disclaiming any intentional reflection or doubt as to his veracity, it is certain that the natives of to-day can never be got to initiate an attack upon them in a similar manner, for when proceeding along a river frequented by the Hippopotamus, they take good care to closely hug the shores and shallows, and never for a moment allow their canoes to float into deep water. Whether this fear arises from any diminution of courage that formerly characterised them, or by an increased ferocity on the part of the animals, due to their having been so ruthlessly fired at and wounded, so much do the Kaffirs dread an onslaught, that it is not an uncommon sight to witness herds

passing unmolested up and down the open water in broad daylight right in front of Moremi's old town at Lake 'Ngami. The natives, although armed with breech-loading rifles, rarely attempt to interfere with them there, probably being deterred by the fear of coming to close quarters in their *moghoros* (canoes), or in the belief that it is merely a waste of ammunition to fire at a quadruped from any distance with so small a portion of the head exposed. Except in very secluded places where it is rarely disturbed, it is quite unusual to observe a Hippopotamus elevate more than a fractional portion of the forehead, eyes, or nostrils above the water (unless well concealed in the dense reeds); and when thus placed, it is not only a useless, but an exceedingly cruel practice to fire, unless the bullet be directed from an elevated position above the water; for, although the animal may be struck, the chances are a hundred to one against the bullet being sufficiently deadly in its effect as to permit of the bodies being recovered. The idea that the brain can be reached by a shot through the nostrils is absurd; at all events it never occurs in actual practice. Many thoughtless persons consider it the height of "sport" to continually plug the unfortunate beasts without the least hope of securing one, and rejoice exceedingly as the bullet strikes some exposed portion of the head, quite oblivious of the dreadful torture and lingering agony which the wounds inflict.

The Hippopotamus emerges from the water shortly after sundown, and passes the first hours of the night in wandering along the shore on the feed, lying recumbent during the remaining hours in the recesses of the bush, and returning to the reed-beds before dawn. Unless disturbed, it will resort to the same dry bed on land night after night, always following the same path to and from the water, and the natives of the 'Ngami, Chobe, and Zambesi, taking advantage of these circumstances, occasionally manage to kill them by excavating huge pits in the beaten tracks, covering the mouths with branches, grasses, and reeds, into which receptacles the unsuspecting animal readily falls. Another plan adopted is to suspend a large barbed assegai, heavily weighted with stones, to a branch immediately overhanging one of these paths, which, on being freed by the Hippopotamus coming into contact with a trigger-rope set directly across the passage, may bury itself deeply in the back, and if not instantaneously, death generally results from the wound within a very short period. Some of the native tribes to the East of the

Victoria Falls adopt a still more cruel method of destruction, and when a herd is found to frequent some narrow pool, they will surround it on all sides with a strong fence, and sit quietly by while the unfortunate quadrupeds slowly perish by starvation.

After inhaling a sufficient quantity of breath, these amphibiæ are capable of remaining under water for fully five or six minutes, or perhaps slightly longer, and although exceedingly helpless on land they swim with sufficient rapidity to overtake a rapidly paddled canoe, which would about equal in pace a quick walk. When the vegetation in the neighbourhood of some frequented pool has been consumed, a herd will migrate to more favourable situations, and in their wanderings may occasionally be found perhaps a couple of days' journey from water. It is needless to state that when thus overtaken, they may be killed without any danger. Taking it all round, however, Hippopotamus shooting is but tame sport, and should only be indulged in when a supply of meat is found to be absolutely necessary. In the first place, it is impossible to tell at once whether a shot has taken deadly effect or not, and when killed outright in the water the body immediately sinks to the bottom; when the weather is cold, unless excessively fat, it will not again rise to the surface for perhaps nine or ten hours; when, however, the weather is warm, and the carcass fat, it will usually float in about five hours. On the other hand, although the ivory of the teeth is excellent in quality, and the hide furnishes by far the best *sjamboks*, both are comparatively of such little value that it appears to any reasonable person a disgraceful act to slaughter so huge, and, generally, so harmless an animal for such paltry booty. However, as nothing that can be said here will conduce much to their preservation, those who have an opportunity, and are anxious to avail themselves of it, had far better choose some night when the moon is full, and lie in waiting in a frequented path, than run the chance of wounding several in the water, and, perhaps, obtaining none.

The meat on the ribs of a cow Hippopotamus when fat, is extremely good, but rather rich for a dyspeptic stomach. It can be improved by salting it slightly in strips, and leaving it to hang in the shade for about a day and night. The flesh of the head, if cooked in the following manner, will be found simply delicious :— A hole of sufficient dimensions should be dug in the sand, and in this a strong wood fire built; the ashes after the fire has burnt low

should be removed, the meat being substituted in their place, and covered again with a thin layer of sand, above which a second fire should be made and kept well alight for about three hours. When thoroughly baked, the outer skin can be peeled off readily, and the flesh, even if served up in the ordinary hunter's rude fashion, ought to be sufficient to satisfy the epicurean appetite of Lord Randolph Churchill himself. The fat can be rendered down, and makes an excellent substitute for butter in cooking. All natives are so excessively fond of it that they will often carry bottles containing the fat hundreds of miles from the Interior for the purpose of presentation to their relatives and friends in the Cape Colony. Before drying out the hide for *sjamboks*, the outer cuticle of the skin should be cut off, otherwise nothing will prevent it from going bad; whilst the teeth, if allowed to remain without grease, or exposed to the atmosphere for any length of time, will splinter and become useless. The familiar grating sound emitted by an un-oiled mill wheel in frosty weather resembles the groaning bellow of "behemoth."

The Giraffe (*Camelopardalis giraffa*).—*Cameel* of the Dutch; *Tut-cla* of the Bechuanas; *'Ngabé* of the Masarwas.

[*Spoor something like that of an ox in shape, only much more oblong, the average length of a bull's slot being from 9 to 10 inches.*]

The Giraffe still frequents the inner and waterless recesses of the Kalahari in considerable troops, and is now nowhere so common in South-central Africa as in that strip of country extending the whole way along the lower bank of the Botletle, it, however, rarely venturing within a distance of twenty-five miles of that river. Proceeding Westward, it is numerous in the camel-thorn forests South of the Queba range of hills in the 'Ngami country, but it is feared that its days there will shortly be numbered, owing to the constant persecution to which it is subjected by the Batawana Bechuanas on the one side, and Lamert's Namaqua Hottentots on the other. Troops still roam here and there in the wooded sand belts of the territory lying between the Botletle and Chobe rivers, and more particularly where the natives have not as yet become possessed of breech-loading rifles, or, what is most deadly in their

pursuit, horses. In Matabeleland it is now uncommon, except in Lobengula's own preserves, and only a few troops to-day linger in Southern Mashonaland.

The Giraffe associates in herds (in South Africa styled "troops"), generally numbering from eight to sixteen, and rarely exceeding twenty, which, as a rule, are composed of one old bull, the remainder being young males or cows. When the bull becomes so advanced in age as to be no longer serviceable to the female portion of his followers, by common consent he is driven from the troop, and some more youthful aspirant steps into the position as leader of the harem. These old patriarchs, so exiled, thenceforth lead a solitary life, completely cut off from all communication with their fellows, and emit such a peculiarly atrocious odour that it is often a matter of impossibility to get a horse to gallop right up to them against the wind. The cows, when heavy with young, drink often, where this is possible, and when in quest of water will separate from the rest of the troop, travelling long distances and braving the many dangers awaiting them in the dense bush which lines most rivers in the Interior of South Africa. Except on these occasions, it is seldom that the Giraffe falls a victim to the Lion, and although when shot their carcases have borne ample evidence, from the claw marks down the back and flanks, of having at one time successfully escaped from the clutches of that animal, those so mauled were almost invariably cows. The bulls always range far away in the thirst tracks altogether unfrequented by beasts of prey, except after heavy rains. A Giraffe, when jumped on by a Lion, will usually rush under the branches of some tree and endeavour to scrape off its deadly rider, in which effort it is often successful.

Just at the moment of going to press with this volume, an extraordinary narrative, written by a gentleman well known in the "thirst-lands" of South Africa, appeared in some of the London papers, and which graphically described an encounter between two bull Giraffes, of which he was a witness, special reference being made to the "roars and shrieks" emitted by them in their struggle for supremacy. In reference to this, it may be said that the ordinary Giraffe (and we only know of one variety), even in its death agony, never gives utterance to the slightest groan or sound. It is at all times an extremely inoffensive animal, and never by any chance makes use of its teeth or hind legs as weapons of defence, at least against man, although the hunter should avoid riding directly in

front of one, as it seldom swerves from its direct course, but will generally strike out viciously with the forelegs with a result probably disastrous to either horse or rider. Anyone rash enough to approach too near to one when mortally wounded, runs the chance of being fallen upon and crushed, an accident from which one of the authors once had a narrow escape. In other respects the chase is attended without any danger from the animals themselves.

They usually frequent the sandy ridges overgrown with low underwood, camel-thorn, and mopani trees, on the leaves of which they feed during the morning and evening hours, standing motionless or reclining during the great heat of the day in the shade of some clump more in the open. From the extreme length of the neck, coupled with their acute vision and scent, they are enabled to detect the approach of an intruder at such long distances as to render the chance of a successful stalk on foot a most difficult feat; and if there is the slightest breath of air, it is utterly useless to follow up a spoor leading down wind, as they would certainly scent their pursuers and make off long before becoming visible themselves. A troop well on the move presents one of the grandest and, at the same time, perhaps one of the most ludicrous sights in the world. Owing to their indescribable rolling gallop, or, more properly, amble, their progress seems slow and laboured, but anyone not in possession of a decent horse will be quickly undeceived in this respect, and, unless pressed very hard at the outset, it would be a difficult matter to say when the chase would end (see remarks on Hunting Large Game). The Giraffe is not by any means in possession of that extraordinary amount of vitality attributed to it by some hunters, nor is it necessary to expend a vast amount of ammunition before bringing one down—in fact, the contrary is the case; and if its dimensions be taken into consideration, it is perhaps on comparison an easier animal to bring to book than any of the South African antelopes. A single bullet from an ordinary Martini-Henry rifle, if properly planted, will be sufficient to kill outright the largest bull that ever trod the Kalahari. The proper place to aim at in a stern chase is the centre of the back, as near as possible over the root of the tail, and if the shot be at all true, even though it fails to touch the spine, the bullet, from the peculiar formation of the animal's body, is almost certain to pierce the vital parts in front.

The appearance and characteristics of the Giraffe are familiar to almost every one, and it is sufficient to say that the bulls when very

old become almost black in hue, the cows being always distinguished in the herd by their generally bright yellow colour. The flesh of the latter when fat is much to be preferred to that of any other description of African game, and in quality equals if not excels the primest grass-fed beef, possessing in addition a slight game flavour, those portions on the ribs being the best. The marrow bones are, *par excellence*, esteemed the hunter's greatest delicacy, while the hide furnishes material for the best ox whips, and the Bushmen use the inner skin of the stomach for water bags. The flesh of the old bulls is only fit for Bushmen, vultures, and Hyenas.

The Cape Buffalo (*Bos caffer*). Fig. 10, Plate III.—(*Buffel* of the Dutch; *Nari* of the Bechuanas.)

[*Height about 4 feet 10 inches at the withers. Uniform colour, grizzly black, through which the reddish skin shows prominently; ears tipped with coarse hair; body very thick set; legs short. The largest pair of horns obtained by Mr. Selous had a spread of 3 feet 8 inches.*]

A FEW troops of Buffalo are still preserved by the Cape Government in the dense forests in the Eastern Provinces. They are said to be still found in the impenetrable bush country about Delagoa Bay. North of the Crocodile, and particularly in the tsetse fly infected and low lying unhealthy countries through which the Sabi, Gorongosi, Bosi, and Pungwe Rivers flow before emptying into the Indian Ocean, they are in unfrequented places still quite common, and may be come upon in large herds, being, however, extremely difficult to get at owing to the deadly nature of the climate. Now almost driven out of Mashonaland, a good many herds yet remain in Northern Matabeleland, along the tributaries of the Zambesi, as also on both banks of the Chobe, and particularly in the angle formed by these rivers before their junction. Once very common throughout the country about Lake 'Ngami, it has now entirely disappeared from there, and is only occasionally seen in the West along some of the swamps of the Okavango. In these unfrequented districts, which are the favoured resorts of the Buffalo, herds exceeding 300 or 400 often congregate, and it is not uncommon to observe a few very old bulls associating together quite apart from the cows and calves.

Plate IX.

Fig. 32.—The Wart Hog (*Phacochœrus æthiopicus*).

Fig. 33.—The White Rhinoceros (*Rhinoceros simus*).

In South-central Africa, or, indeed, wherever the Buffalo is met with in abundance, the tsetse fly (*Gossina morsitans*) is everywhere prevalent. This dire pest is not quite, but very nearly, as large as the common horse fly found in England, being of a leaden grey colour, banded transversely with four light yellow pinkish bars, and the wings are similarly situated to the common house fly. The bite is deadly to all domesticated animals, except such as are actually bred in the districts frequented by the "fly," and even these are not always invulnerable to the poison injected from the proboscis of the insect. When horses or oxen are "stuck," they do not show any signs of the fact until they have experienced a thorough wetting, but immediately after this, the coats of the doomed beasts stand on end, the nostrils start running, and emaciation sets in rapidly, death finally supervening from debility. Neither the exact nature of the virus, or any cure or preventive, has up to the moment of writing been discovered. From the foregoing remarks it must not be understood that fatalities will occur from the bites of one or perhaps half-a-dozen flies, but where bitten to any extent the result is always disastrous, and, although not so to mankind, its effect upon bipeds is extremely painful, scarcely less so in fact than the sting of a bee. The tsetse is possessed of remarkable agility, and is difficult to catch with the hand, but they may be readily captured by pinning the legs with the blade of a knife, and this should be done, if possible, where they have alighted on animals in districts where they are presumed not to exist in any great numbers. Some authorities are willing to account for this pest being always found in attendance on the Buffalo by the fact that the insect hatches its eggs in the skin or the dung of that animal.

The reputation for ferocity enjoyed by the Cape Buffalo has been much exaggerated, for on being disturbed it generally prefers to run away rather than initiate an attack. The reverse will, however, often be found to be the case with some whose tempers have not been rendered equable by the recollection of the unpleasant effect produced by some bullet or assegai wound inflicted in past days, and an unprovoked charge from one of these may not be wondered at. As exemplified by the numerous fatalities which have occurred attendant upon their projected destruction (with perhaps the exception of a "cornered" Lion), there is no animal in Africa so dangerous to tackle when wounded, and especially when followed up in thick bush. They will there very often lie in waiting

concealed from view, and without any other warning than that of a fierce grunt, dash upon their pursuers, whose attention at the moment may be occupied in tracing the blood spoor. It is not alone a waste of ammunition, but also a very hazardous experiment, to fire at a Buffalo standing or charging directly head on, as, owing to the formation of the horns, the chance of a bullet reaching the brain or inflicting an injury calculated to stop its rush is almost hopeless; nor is any opportunity afforded in such a position of penetrating the vitals with a shot fired into the trunk from over the head, as it charges with the nose thrust out straight on a line with the back, and only lowers the horns at the moment of striking. Where possible, a shoulder shot should always be tried, a ·577 express being preferably recommended to a rifle of smaller calibre. The cavity of the bullet should be narrow and shallow, so as not to allow of too much expansion. For a heavy and short-legged animal, it can run with great rapidity, as anyone mounted on a slow horse would find out to his cost if pursued by one.

The Zebra (*Equus zebra*). Fig. 36, Plate X.—(*Wilde Paard* of the Dutch.)

[*The true Zebra rarely exceeds 12½ hands at the withers, and in comparison to Burchell's Zebra the ears are long; head, hoofs, and tail more asinine in shape; transverse stripes narrower and more frequent, commencing close over root of tail, but disappearing on the upper sides of belly, which is white; all four legs ringed completely down as far as the hoofs; mane scanty and irregular, commencing at the back of ears and disappearing before reaching shoulder.*]

A FEW herds of the true Zebra still remain in some of the Eastern districts of the Cape Colony, and especially on the Zwartberg, Sneeuwberg, and Winterhoek ranges, upon the summits of which only are they found, but as they are now very strictly preserved and do not, therefore, form a portion of the wild game of South Africa, an extended reference to the species is unnecessary.

Burchell's Zebra (*Equus burchelli*). Fig. 34, Plate X.—(*Quagga* of the Dutch; *Peetsee* or *Peetsee tolatsan* of the Bechuanas.)

[*This species of Zebra oftens attains a height of 13½ hands at the withers. The shape of the head resembles, and the hoofs are almost similar to the horse. General colour above varies very much, in some being nearly pure white, in others approaching to chocolate; the alternate black transverse stripes join underneath the belly, and becoming less distinct down the outer sides of the legs, finally disappear in white before reaching the fetlocks; inside of legs usually white, but in some cases fairly banded; the mane, commencing well out on the forehead, ends low on the shoulder, and is long, thick, regular, fully erect, and banded alternately with black and white. The spoor is difficult to distinguish from that of a Basuto pony.*]

BURCHELL'S ZEBRA (commonly, but erroneously, called the "Quagga" by almost every trader and hunter in the Interior) never at any time ranged so far South as the Orange River. At the present day it is practically exterminated in the Transvaal, although it is probable that a few herds still remain in the low country South of the mouth of the Crocodile River. Frequenting only open level plains, or those that are sparsely covered with bush, this Zebra is now rarely seen in a direction South of the Botletle River, although after heavy rains it is not uncommon to find a few straying farther into the Kalahari. On the Botletle it is still quite plentiful, as also along the Mababe Flats and the level country along the Chobe and Zambesi, otherwise in favourable localities, and where not driven out by natives, Boers, and sometimes European hunters and prospectors, it may still be found in numbers.

Fault can scarcely be found for shooting the "Quagga," either for the purpose of securing a specimen, or where it becomes a matter of actual necessity to provide fresh meat for consumption on the road, but otherwise the wanton and criminal destruction of this beautiful animal by some so-called "sportsmen," is as much to be deplored as it should be strongly condemned. When a person is heard to boast of his prowess in having shot five or six, and wounded perhaps double as many more, out of the same troop, we know that true sport is over, and that disgusting slaughter has commenced. Unfortunately these remarks are applicable to all other game, but more especially so to this species of Zebra, as they approach the water nightly for drinking purposes, and their fresh spoor being therefore the more readily discovered, they may be hunted up with but little

difficulty, and with a fast horse numbers can easily be destroyed. In referring to the wholesale destruction of game, it is pleasing to remark that it is seldom one hears of Englishmen disgracing themselves as ruthless butchers, this being the prerogative of the ever-killing and insatiable Boer or native, whose small thoughts and ideas are confined to the present, and never to the future.

Burchell's Zebras may sometimes be found in herds of from 50 to 100, but more often numbering from 10 to 15, and they are commonly found associating with Ostriches, Blue Wildbeests, and Hartebeests. On being hunted, and if not urged too much at the start, they generally keep in single file, the stallions being in front, but when hard pressed they run more in a lump, and at such times it requires a really good horse to overtake them. In a stern chase shot, an expanding bullet has little effect, as it will not penetrate beyond the thick fleshy portion of the rump. When one is wounded, it will invariably separate from the remainder of the troop, and it is always more merciful and sportsmanlike to follow it up until despatched than to pursue the others. The neigh of this species resembles in sound the subdued whining bark of a dog. The flesh to white men is coarse and flabby, with a disagreeable sweet taste, but as it usually possesses a large amount of yellow fat, it is preferred by the natives next to that of the Hippopotamus. It is the common prey of Lions, which generally frequent its drinking places.

The *Equus burchelli* varies so much in its general colour, that there are not sufficient grounds for believing *E. chapmani* to be a distinct variety, as has been claimed for it.

The Quagga (*Hippotigris quagga*).

[*Height about that of the common Zebra. Upper parts of light reddish brown; head, neck, and upper portion of shoulders lined with dark stripes, which become fainter on back and disappear on the loins; chest, belly, and tail (except at the root) are white.*]

The Quagga at one time frequented the upper portion of the Cape Colony in considerable numbers, but it is now thought to be extinct, although it may be observed that Mr. W. L. Distant, the naturalist, has stated that he recently saw two live specimens exposed for sale on the Pretoria Market, but it is not improbable that he confused them with *Equus burchelli*.

The Wart Hog (*Phacochœrus œthiopicus*). Fig. 32, Plate IX. —(*Vlaakte Vaark* of the Dutch; *Colubee* of the Bechuanas.)

[*Height seldom exceeds 27 inches, being more frequently under than over that standard. General colour of the skin varies from black to earth brown, the bristles on neck and top of head blackish brown, long, erect, and growing, as it were, from a common centre, those on body sparsely distributed, greyish, and short; a patch of white closely-set bristles on either cheek; tail long, narrow, tufted at extremity, and carried erect when in progression; snout broad and oval-shaped, ending abruptly a little in front of tusks. The tusks of both jaws developed, but those of the upper to an enormous extent, some occasionally exceeding 12 inches along the curve. There are four warty excrescences on the face, those on cheeks under eyes large and prominent, those placed on the nose behind the tusks being smaller.*]

This is the common Wild Boar of the Interior of South Africa. It is probable that some still remain in the forest regions of the Eastern districts of the Cape Colony and Natal; in Northern Zululand and the Delagoa Bay country they are reported to be fairly common in places, whilst a few are certainly to be found in the thick bush skirting the Molopo, West of Pitsani, as they were observed there last year; but otherwise in Bechuanaland, the Protectorate, or the Transvaal, they are anything but plentiful. Between the Crocodile and Zambesi Rivers, in unfrequented places, they may be generally met more or less numerously, and in the low country about Sofala they are very common, but keeping very close to the dense thorn-bush during the day, they do not, as a rule, form a large proportion of a hunter's bag. It is quite unusual to find them straying far from water except after heavy rains. If the ferocity of the Wart Hog were at all proportionate to the extent of its tusks, it would indeed prove a most formidable antagonist, but a really good powerful dog ought at any time to be capable of holding one fast, although he might not be able, single handed, to kill him. Indeed, as a contribution to the traveller's sport, very little may be depended upon from the pigs, except when they are ferreted out by the wagon dogs in the bush. Opinions are divided as to the merits of the pork as an article of food; some may consider it rather a luxury, but the majority of those who have partaken of it agree that it should be avoided unless where absolutely necessary.

The Bush Pig *or* **Southern River Hog** (*Sus larvatus*).

[*Height about the same as the Wart Hog, the body, however, being longer. General colour, reddish brown, profusely mixed with grey; snout long, projecting considerably in advance of under jaw; ears excessively long, and running gradually to a point, the extremity of the tips being tufted with bristles and generally resembling in appearance those of the Red Lynx* (Felis caracal); *a very remarkable extended bony excrescence on bridge of nose; bristles close and very long, particularly so down the centre of back and overhanging rump; tail tufted at the extremity, on progression being held downwards. Tusks resemble the common wild Boar* (Sus scrofa).]

In Matabeleland and Mashonaland this species may be met with, but it is extremely scarce, although perhaps more common in the low-lying bush country to the East. In Bechuanaland, Damaraland, or the 'Ngami country, the natives do not even appear to be aware of its existence. In the forest districts of Natal and the Eastern Provinces of the Cape Colony its presence is often reported, and in Zululand it appears to be rather plentiful. It is never found any great distance from water, and always frequents the densest bush.

The Cape Hare (*Lepus capensis*).—*Vlaakte Haas* of the Dutch. The Bechuana and Matabele term for all the Hares is *Mootcla*.

[*Body considerably smaller than the common English Hare, the legs being very short in comparison. General colour, brownish grey with reddish tinge; underneath, reddish fawn; ears very long, almost devoid of fur, and always held erect when pursued.*]

This animal frequents open flats, and is generally met with in the Karoo bush of the Cape Colony, and, indeed, throughout temperate South Africa.* The Hares of South Africa deserve little consideration from a sporting point of view, as they are incapable of running with any great speed, and when pursued will take to ground on the first opportunity in some meercat or spring hare burrow. The species now under notice is a particularly unclean feeder, and

* There is another Hare found in the Interior smaller in size, and of a pale yellowish brown colour, and which may eventually prove to be a distinct variety.

can generally be come across in the neighbourhood of some native kraal, its principal diet consisting of human excrement. For this reason, as may be imagined, the flesh is not much in requisition. It is worthy of remark that the bodies of all the varieties of Hares, particularly in the cavity of the ears, are invariably found to be infested with ticks.

The Rock Hare (*Lepus saxatalis*).—*Klip Haas* of the Dutch.

[*Somewhat larger in body, with longer legs, than the last described. General colour, mottled brown; underneath, dirty white; ears very long.*]

This variety is generally found frequenting low ridges of stony *kopjies* along the river banks, but it does not appear to be met with in the far Interior.

The Mountain *or* **Thick-tailed Hare** (*Lepus crassicaudatus*).—*Rooi Haas* of the Dutch.

[*Size about that of a full grown rabbit. General colour, bright foxy red, paleing underneath; legs very short; tail disproportionately large and thick.*]

This Hare only frequents the high *kopjies* of the Cape Colony, Natal, Orange Free State, and the Southern portion of the Transvaal, being unknown further North.

BEASTS OF PREY.

The Lion (*Felis leo*).—*Lieuw* of the Dutch; *Tauw* of the Bechuanas; *Isilouan* of the Matabele; *Shumba* of the East-coast natives; *'Gham* of the Masarwas.

Lions everywhere differ so much in size and colour that old hunters, both English and Dutch, positively assert that there are at least three or four distinct species, but as a matter of fact, there is really but the one in Africa. In some instances full-grown males have been found in South Africa of a fawn colour so light as to be little removed from dirty white, and with scarcely any appearance of mane; while others in the same district, although not so advanced in age, may be ornamented with full flowing manes and dark brown coats, and *vice versa*. It is also worth mentioning that cubs from the same mother will very often vary in hue, and that, contrary to the usual belief, Lions in captivity bear a much more imposing appearance than when found at large in their native haunts. They are usually met with in pairs, but also frequently in troops up to ten in number, composed of two, three, or, perhaps, four generations. A few still remain in the extreme Northern confines of the Zoutpansberg district of the Transvaal and about Delagoa Bay. In British Bechuanaland their presence is now and then reported from the extreme Westwardly course of the Molopo River, before its waters become absorbed in the sands of the Southern Kalahari. But Northward, without mentioning any particular locality, throughout South-central Africa, wherever large game is plentiful, they are more or less numerous, particularly so in the low-lying countries along the East Coast, and the presence of Burchell's Zebras in quantities is a sure indication that Lions are to be found in the vicinity. It is only in places little frequented that one is lucky enough to come across these animals during the day; but from recent accounts Providence appears to have made special dispensations in favour of a few "sporting" neophytes who have visited Mashonaland.

Plate X.

Fig. 34.—Burchell's Zebra (*Equus burchelli*).

Fig. 35.—The Black Rhinoceros (*Rhinoceros bicornis*).

Fig. 36.—The Zebra (*Equus Zebra*).

The character for bravery, nobility, and magnanimity generally attributed to Lions exists only in the imagination of those who have so described them, nor are they for a moment such clean feeders as they are usually represented to be, it having been commonly observed that they will return night after night and gorge on the putrid carcass of an animal which probably owed its destruction to some other beast of prey. When desperate through hunger, and especially in the case of those that have become decrepit and unable to kill game on their own account, they will unprovoked not infrequently attack man himself, but rarely otherwise. Man-eaters are naturally always to be dreaded, but their existence is usually of short duration, as the natives in a district frequented by one showing a disposition for human flesh, gather in numbers and quickly exterminate the animal. Very little danger may be expected from those that roar freely during the night, as a full voice is invariably a sure sign of a full stomach; but when one is heard to utter low snarling whines at intervals, it may be assumed that there is a vacuum somewhere, and that mischief is intended, wherefore extra precaution should be observed, or, as the Dutch hunters say, "boss up."

It is a curious fact that, instead of objecting to, the Masarwas (Bushmen) rather favour, the presence of these animals, not, it may be premised, out of any particular motives of personal regard, but because they are well aware that where Lions are numerous, it follows that they run the chance of obtaining constant supplies of meat without undergoing any extra personal exertions on their own part. This may more readily be understood when it is recognised that, except on rare occasions, Lions hunt only during the night, and having satisfied their hunger on killing a head of game, invariably forsake the carcass before dawn, retiring into some patch of dense bush, where they pass the day in sleep. On such occasions the sun is not very high in the heavens before the vultures are attracted from all quarters to the body of the slain animal, and the Masarwas, following the flights of these unerring guides, usually arrive in time to partake of the remnants of the ready provided feast.

In comparison to its size (a full-grown Lion weighing about 500 lbs.) the strength of this animal is certainly enormous, but such accounts of its capabilities for "clearing high *skerms* (artificial thorn fences), encumbered with the weight of a three-year old heifer," and similar statements of the kind, must not be accepted;

nor, on the other hand, must the powers of any animal that is strong enough with one wrench to break the spine of the largest draught ox be depreciated. Lions have different methods of seizing and killing their prey, but that usually adopted in the case of the ox or Eland, when springing on to the back of one of these animals, is to insert the claws deep into the flesh of the victim, those of the left hind foot low down on the near flank, almost at the stomach, of the right hind paw high on the rump, the right fore paw in the centre of the off shoulder, and with the purchase so obtained, to bite into the nape of the neck, simultaneously wrenching the head round by grasping the nose with the claws of the left fore paw. As one of the numerous evidences in support of this assertion as to how they kill their quarry, it may be mentioned that three years ago four oxen out of a span were killed by Lions on the Botletle River in one night, every one of which on careful examination had their necks broken exactly in the manner described. Mr. Erickssen, the well-known naturalist and hunter, was a witness on one occasion when the ox turned the tables on the Lion. The incident took place in the 'Ngami country, where a full grown Lioness sprang on to the back of one of a considerable herd of cattle, and the remainder, instead of dashing off mad with terror, rushed on to the aggressor and gored her to death. On proceeding to devour an ox, the Lion usually commences his operations by making an opening in the region of the scrotal organs, from which the liver and some of the other entrails are extracted and devoured before any other portion of the body is touched.

Although Dr. Livingstone has denied that there is anything very much out of the ordinary in the voice of the Lion, comparing it to that of a cock Ostrich (which no doubt it resembles on a small scale), most persons, however, who have had opportunities of judging, will scarcely agree with his statement, and will unite in saying that there is no sound in the world so truly awe-inspiring and terrific as the roars of a troop of these animals as they prowl around a hunter's camp in the dead of night.

When accompanied by three or four fairly courageous dogs, however, an encounter is seldom attended with any great prospect of danger, especially when one can be brought to bay away from the vicinity of thick bush; but to persons not possessed of a strong nerve and excellent shooting powers, this sort of sport is not recommended. For hunting purposes of this description, a cross between

the greyhound and bull-terrier is preferable, as, on the one hand, they usually possess enough courage to keep a Lion's attention engaged, thus affording an opportunity of approaching close up and putting a bullet into a vital part; on the other hand having sufficient activity to avoid the animal's teeth and claws under circumstances where a more highly bred and courageous dog would of a certainty undergo utter extinction. Whilst upon this subject, it is as well to mention that no matter what the attributes of any dog may be, he should not be trusted until tried, as even the most vaunted champions among their own breed will, with bristles erect but tail down, retire at the very first whiff of a Lion. In following up a spoor, the dogs should be held up and only let loose when the game is almost at hand; and when the sun is very hot each animal should be given a little water from the calabashes or canvas bags usually carried on such occasions, before engaging in the encounter.

When hunting on horseback, and possessed of a speedy and well-trained nag, the danger is minimised, for, although a Lion when close at hand might possibly overtake a horse in the first rush, it never continues the chase when this fails. Expanding bullets should always be used when at very close quarters, as solid ones, if missing the vitals, will drive clean through the body without giving the system any shock. As regards the question of vitality, it is no exaggeration to state that under similar circumstances the same bullet, which would appear to take but little immediate effect on an ordinary antelope, might probably disable a Lion and prevent him either escaping or charging. It is as well to observe that following up one of these wounded animals in thick bush without the assistance of dogs, can only be attended with extreme peril. When all other plans have failed, the following but not very sportsmanlike device can be resorted to with effect for their destruction. At a sufficient distance from camp, a lung-sick or worn-out ox may be tied to a tree as a bait, and a strong and high thorn *skerm* built close around the animal, one entrance to which, about 2 feet wide, should be left open, across which the muzzles of a couple of set guns may be directed. The captive, when alone and deprived of the society of its kindred, will usually set up a lowing sufficient to attract the attention of any prowling Lions, and in this way many are bagged, although the incidents attending their destruction, on narration, usually assume a more pretentious exhibition of personal bravery.

If they are at all inclined to give trouble, they will invariably choose a dark or rainy night for their operations, and when travelling in infested districts by ox wagon, it is advisable to have the cattle tied securely to the trek-tow before sundown, which should be fastened in front to the ground with strong iron pins, thus preventing the oxen from pulling sideways. The horses should also be double *reimed* to the side of the wagon, more especially if there are any white ones among the lot (as Lions will generally pick out a white horse in preference to others), and a sufficient supply of dry wood brought close to hand with which keep the fires well up during the night, taking care to build the largest in front of the leading pair of oxen. Cattle or horses are not much disturbed at the appearance of the Lion itself, but the smell of one terrifies them, and without any roaring or growling its presence is immediately detected, when the cattle commence to breathe in a loud and hurried manner, followed, if recumbent, by starting quickly to their feet with every appearance of terror, the horses meanwhile snorting and tugging at their *reims*.

One word more. Never, on any account, trust the skinning of a Lion to native attendants, as the first thing they will do is to cut off the claws and render the specimen almost worthless.

The Leopard (*Felis pardus*).—*Teegre* of the Dutch; *'Nkwai* of the Bechuanas.

It is only now and again that the depredations caused by this animal and its ultimate destruction are reported at the present time in several districts of Natal and the Cape Colony. When the flesh of their ordinary prey, which chiefly consists of chacma baboons (*Cynocephalus porcarius*), varied with an occasional Rhébuck or Klipspringer, is unobtainable, they are compelled to devote their attention to the sheep and goat kraals of the farmers. As might be supposed, after a visit of such a nature (if the number of men and dogs engaged in the chase be taken into consideration), the Leopard has rather a lively time of it, and is generally either killed or compelled to migrate to pastures new. A few still exist in some of the mountains of the Transvaal and hills of the Bechuanaland Protectorate, but Northward, where other game is abundant, they are more often to be met with. They are never anywhere very numerous, and even where fairly so, are rarely seen, as they

only venture abroad during the night. In contradistinction to their congeners the Cheetahs, they frequent a hilly and broken country, but this is not always so, as there are a good many along the banks of the Chobe and Botletle, near which rivers there are no hills whatever. Although fatalities in connection with the Leopard do not often occur in South Africa, a good many white hunters, and all natives as a rule, consider them more dangerous to tackle than the Lion, as, when wounded, they will fight to the last, and when hungry are extremely audacious. Unlike that animal, their attack is always conducted with the utmost stealth, and without any preliminary growling; and any dog daring enough to venture beyond the wagon fires when any of them are about, is almost certain to come to a bad end. Except when hunting in couples, it is unusual for them to attack the very large antelopes, but they are extremely destructive to the smaller varieties and the young of all, including the Giraffe, and when pressed by extreme hunger, man himself is not free from assault. It invariably seizes its prey by the throat, and when hunted with dogs, takes refuge in trees, from which position it may be shot without much difficulty or danger, providing the hunter keeps at a distance sufficient to be out of range of the animal's spring. Expanding bullets should always be used in such encounters, but when at very close quarters, nothing proves more efficacious than a charge of buckshot fired from a shot gun. The flesh of the Leopard and Cheetah, equally with that of all the Jackal tribe, is highly esteemed by the natives, and a gentleman of our acquaintance—not recognising the difference between the Bechuana terms '*Nkwai* (Leopard) and '*Nku* (sheep)—was induced to try it, and declares it not to be at all bad, somewhat resembling veal in flavour.

Two varieties of the above species have been described by Dr. A. Günther, F.R.S., in the *Proceedings* of the Zoological Society dated respectively May, 1885, and April, 1886.

Felis leopardus, var. *melanot.* — "Killed near Grahamstown. Ground colour tawny, with a rich orange gloss about the shoulders. Of the rosettes only a few indications are preserved, viz., on the haunches, where two are visible on the right side, while they form an irregular confluent pattern on the left. The remains of rosettes are also visible on each shoulder."

Felis leopardus, var. *melanotica.* — "Killed in the district of Albany. There are no rosettes at all on the larger portion of

the skin, the spots not even showing through the black." From the photograph exhibited of the skin of this specimen, it would appear that, except the underneath, the entire surface must have been almost black. Although it is very difficult to get two skins altogether matching in colour, we have never observed (at least in the Interior of South Africa) any so strongly marked differences as the two above described.

The Cheetah (*Cynœlurus jubatus*).—*Teegre* of the Dutch; *'Nkwai* of the Bechuanas.

[*Appearance strongly distinguished from the common Leopard. Body very much elongated; legs long, betraying little appearance of strength; skull very high in proportion to length of head; fur woolly in appearance, particularly underneath. General colour, bright rufous fawn, almost pure white beneath neck and belly, and except in the latter parts, the surface is marked with numerous uniform black spots, round on the back, and becoming more irregular in shape and less conspicuous further down; mane fairly developed; tail curled, long, and bushy at the extremity; pupils of eyes circular and not oblong; a distinguishing black mark between the eye and corner of mouth.*]

This species is probably extinct in Natal, and nearly so in the Cape Colony, its presence being occasionally reported from one or two districts in the extreme North-west. A few still remain in the North and North-east of the Transvaal in unoccupied places. In the waterless portions of the Kalahari—where it is supposed to quench its thirst with the blood of its victims—and in the lower independent native territories of the Bechuanaland Protectorate, it is a little more common. It may be met with in flat bush-covered districts throughout South-central Africa, but it cannot be said to be anywhere very plentiful; indeed, it is somewhat an unusual occurrence to come across one at all. Although a good many skins are yearly brought from the interior by traders, they are mostly from animals that have been trapped by natives. The prey of the Cheetah chiefly consists of the smaller antelopes and the young of the larger Hares, spring hares (*Helamys capensis*) and Guinea Fowl. The only damage sustained by human beings from its depredations is the occasional lifting of a stray sheep, goat, or calf; and it is only on rare occasions that one attempts to enter a cattle kraal. In fact, as

much danger might probably be expected from an encounter with a Red Lynx (*Felis caracal*) as with a Cheetah. It is well known that this animal is easily trained for hunting purposes in India, but the experiment has never yet been tried in South Africa. Its character is anything but savage or vicious, and even the most timorous natives will, when an opportunity presents itself of coming into close contact with one, without the assistance of any other weapon rush in and kill it with knobkerries. It may be observed that, although the claws are always exposed, and not altogether retractile, their impress is well marked in the sand, the spoor being nearly round, and shaped very like that of a rather large-sized dog.

The Woolly Cheetah (*Felis lanea*).

[*The fur much more woolly and dense than the Cheetah, as particularly noticeable in the ears, mane, and tail. The whole of the body is of a pale, isabelline colour, rather paler on belly and lower parts, but covered all over—including the belly—with roundish dark fulvous blotches. There are no traces of the black spots which are so conspicuous in all the varieties of the Cheetah, nor of the characteristic black line between the mouth and eyes.*]

This variety was first alluded to by Dr. Sclater, Secretary of the Zoological Society of London, being described by him in the *Proceedings* of that Society in 1877, to whom we are indebted for the above description. The specimen referred to was brought from near Beaufort West, in the Cape Colony, and placed in the Zoological Gardens. Upon reference to the description there can be little doubt that the animal is distinct from the common Cheetah. The species has not, within our knowledge, been observed further Northwards.

The Serval (*Felis serval*).—*Bosch* or *Teegre Kat* of the Dutch; *Tali* of the Bechuanas.

[*Height 19 or 20 inches. General colour, reddish orange, approaching brown down the centre of back, which is arched, paleing to white underneath; body covered with black to dark brown spots, some of which are round and others irregularly shaped; in the centre of the back these spots run together in longitudinal stripes; two strongly marked transverse bands of black across the inside of*

the upper part of each of the fore legs; head and body rather slender; tail short; legs and ears long, the latter being somewhat rounded and devoid of the long hairs on the tip peculiar to the Lynx.]

At the present time it is only on extremely rare occasions that this very pretty and graceful animal is found any considerable distance South of the Tropic of Capricorn; Northward throughout South-central Africa it is fairly common, frequenting the thick bush in the vicinity of the rivers. The *karosses* made from its skin are only worn by the chiefs and the very high dignitaries amongst the native tribes, and are, in consequence, eagerly sought after, on which account the species runs a chance of rapid extermination. Its usual prey consists of the young of the smaller antelopes, Francolins, and Guinea Fowl, to the latter of which it is a most destructive enemy in the breeding season. When obtained young, the Serval can be tamed with little trouble, and makes an exceedingly beautiful and docile pet, but it is at first difficult to rear, and even in a state of domestication always bears a singular and most unaccountable aversion to black men, its otherwise even temper being at once aroused at the appearance of a native. When in anger, it is by no means a despicable antagonist, and very few dogs will engage in combat with it single handed. Entirely nocturnal in habits, it may be passed over from a sporting point of view.

The Caracal *or* **Red Lynx** (*Felis caracal*).—*Rooi Kat* of the Dutch.

[*Height 15 or 16 inches. The colour varies in different specimens from light red to purplish brown, being free from spots or markings, but darker along the centre of back; throat and under parts white; body long, thick-set, and powerful; legs and tail short; ears very long, gradually tapering to a point, back and tips being black, the latter having long pencilled hairs of the same colour.*]

The range of the Caracal is far more extended than the Serval, but if still met with South of the Orange River it must be only on very rare occasions. It is said to be tamed by some of the native princes in India for hunting small game in a similar manner to the Cheetah. Climatic influence may have something to do with the disposition of the animal, as in South Africa, when its size is taken into consideration, it is justly reputed to be, without exception, the

most savage and intractable of the *Felidæ*. Even when obtained quite young and brought up by hand, it gradually develops a character, so to speak, of pure "cussedness," that any attempts to tame it have invariably proved unsuccessful. The Boers hold to the belief—which is often treated with ridicule—that the skin of this Lynx, when made into and used as *karosses*, is a sovereign remedy against an attack of rheumatism. Whether they really possess any curative virtues it is not within our province to determine, but their general use is greatly favoured in South Africa; it is certainly a fact that the fur of the dead animal is highly electrical. Thick bush and the vicinity of rivers are not so much associated with the Caracal as the Serval, frequenting as it does more open country at considerable distances from water. In its movements it is wonderfully rapid when climbing trees, and its strength and activity are so great as to be more than a match for the best dog. Several instances have occurred where individual females, anxious for the safety of their young, have boldly attacked natives, only being killed or driven off with much difficulty.

The South African Wild Cat (*Felis caffra*).—*Wilde Kat* of the Dutch.

[*Size about the same as a very large domestic cat. General colour, dark grey, some specimens having an orange tint throughout; centre of back rather indistinctly striped with black, more definitely so on the thighs; legs same colour as body, ringed with black; body thick set; tail rather long for a wild cat, tipped for a couple of inches with black, a few irregular rings being further up.*]

This is the common Wild Cat of South Africa, and although rarely distributed in sparsely populated districts of the Cape Colony and Natal, it may be plentifully met with throughout the Interior. Its habits very little differ from those of the ordinary wild cat of Europe.

The Reed Cat (*Felis chaus*).—*Reit Kat* of the Dutch.

[*Stands somewhat higher than the last described. General colour, pale grey, inclined to yellow, under parts lighter; fur short and thick; in some specimens there is no appearance of lines or marks whatever, while others show slight indications of brown*

markings; broad brown bars on the inside of legs; tail long and slender, tipped with black, same colour as body, with some dark-coloured rings.]

This species, which is rarely found South of the Orange River, but is common within the tropics, seems to be often confounded with the Booted Lynx (*Felis caligata*), which does not appear to be known South of the Zambesi. The animal now under notice will always be found frequenting low marshy ground in which there is plenty of cover in the shape of reeds, or in the thick bush bordering the rivers and lakes, its food consisting not alone of such water-fowl as can be snatched by it when they are resting on the margin of the water, but also of fish; and its spoor may be constantly observed imprinted on the soft mud surrounding such pools in the periodical watercourses which are rapidly becoming desiccated, and in which many species of the finny tribe may probably be imprisoned without a possibility of escape.

The Spotted Hyena (*Crocuta maculata*).—*Teegre Voolf* of the Dutch; *Peeree* of the Bechuanas.

[*General colour, dirty yellowish brown, indistinctly spotted all over with the same colour, but of a darker hue, and inclined to run in lines; hair short; scarcely any appearance of mane; head large in proportion to size of body, and betraying extraordinary strength in the jaw. The hind considerably shorter than the fore legs; ears rounded and not pointed as in the Brown Hyena. It is rare to obtain a specimen unaffected with mange, and in some cases the skin of the lower portion of the legs is found eaten away by the disease.*]

This is the common Hyena of the Interior of South Africa. It is doubtful whether it still exists in the Cape Colony, Natal, or the Orange Free State, and is very scarce in the Transvaal and on the Western borders of Bechuanaland. In the Kanya and Bakwaina countries of the Protectorate the natives still suffer from its depredations in their sheep and goat kraals, but between the Crocodile and Zambesi Rivers, where other beasts of prey are to be met with, it is sure to be about, and it is seldom that a Lion proceeds on its nightly rounds unattended at a respectful distance by at least two or three Hyenas. Only prowling after dark, and at all times an arrant sneaking coward, little danger may be apprehended

from an attack on domestic animals when close up to a wagon; but as its strong perfume is likely to cause a stampede during the night, its presence is always a source of great annoyance to travellers. Hyenas, as a rule, will not venture to assault a full-grown healthy ox; but they will make short work of such as are sick or weary, or which may have strayed away any distance in the darkness from an encampment. All smaller animals should be securely kraaled or fastened close up to the fires, donkeys especially so, as they are sure to engage special attention; and in this connection it may be remarked that there is no more distressing and heartrending sound in the world than that uttered by a donkey when struggling in the deadly grip of these brutes, who generally seize it underneath the anus the more easily to disembowel it. It may therefore be readily imagined that they deserve little and receive no consideration, traps, spring guns, and poison being used indiscriminately in their destruction. Any sort of high-smelling offal will do as a bait for the trap, which should be set inside a strong, thick, but narrow thorn fence, one small opening being left, which, if entirely free, the chances are ten to one that a Hyena will sneak the bait without being pinned. It is, therefore, necessary to close up the one entrance with bushes to a height, say, of 2 feet, which obstacle an animal must jump to arrive at the bait, and if the trap be properly set on the ground, it is almost certain that the marauder will land right on the top of it and its capture secured. As an attraction, it will be found useful to trail some meat (the more it stinks the better) for a considerable distance from the lure. Suitable *tigre* gins may be obtained at any of the large ironmongery establishments in the Colony.

Two or three good dogs will be sufficient to keep Hyenas at a respectful distance when darkness sets in. Their howl is most dismal, commencing in a prolonged moan and ending in a weird shriek, and it is only when in the enjoyment of a hearty meal that they "laugh." The Hyenas of South Africa do not appear to be so much addicted to human flesh as they are said to be in other portions of the world, and it is not uncommon to find an unburied corpse remain untouched by them night after night, even in places where they are numerous. This may be accounted for owing to their dread of the smell of man, but among such tribes as the Matabele (who are accustomed to cast the dead bodies of those who have been executed for witchcraft outside their kraals), the Hyenas,

probably from custom, seem to have got over any such difficulty, and eagerly devour the remains the moment night sets in.

The Brown Hyena (*Hyœna brunnea*).—*Stronte Voolf* of the Dutch.

[*Height about the same as the Spotted Hyena. General colour, brown, clouded with a darker shade of the same hue; indistinct transverse markings on thighs, becoming prominent on the legs; head, tail, and body longer, the latter less bulky in appearance; hind quarters little sloped; ears comparatively large, straight, and pointed; hair all over long and coarse, especially along the back, sides, and over rump, where it is sometimes 8 or 10 inches in length; no prominence of mane.*]

This species of Hyena appears to be peculiar to South Africa alone, and is the most common in maritime districts. An odd one may still be found in the most unfrequented portions of the Cape Colony, particularly in the North-western territory, being more plentiful in the Interior, but nowhere is it so common as the Spotted Hyena. One was killed last year within five miles of Mafeking. Its habits are almost identical with the species last described, but its disposition is not nearly so aggressive or daring. It mostly frequents the banks of rivers or the sea shore in search of such dead fish and garbage as may be thrown up by the water.

The Ard Wolf *or* **Mona Jackal** (*Proteles lalandi.*)

[*Height about 19 inches. General colour, yellowish or reddish brown, with a few vertical black bands on the sides of the body, others being horizontal on the legs, the markings somewhat resembling the Striped Hyena* (Hyæna straita) *of Northern Africa.** *General appearance extremely like the true Hyenas; the body sloping very much in the direction of the hind quarters, but is different from them anatomically; snout rather long and pointed; ears very much so; tail rather short and bushy; four toes only on the hind feet; upright mane of stiff hair down the neck and back; remainder of fur long and woolly.*]

* It has been asserted that the Striped Hyena has been found in the Zambesi regions, but it is probable that it has been confounded with the brown variety (*Hyœna brunnea*).

THE "Mona (maned) Jackal," by which name it is most commonly known, may be found all over South Africa, being very scarce below the Orange River, but gradually becoming more numerous further North. Although these animals make their burrows near each other, several frequently occupying the same holes, they must not on this account be considered gregarious, for when discovered abroad during the day, more than two or three are never met with at the same time, nor do they at all hunt in packs like the Wild Dog. When pursued they run slowly, and can be overtaken at any time by ordinary Kaffir mongrels, and, showing little disposition to fight, are easily killed by them. This remark only applies to the males, as, when a female is overtaken, the dogs, instead of injuring, will make every attempt to caress her. Like its congeners, the Ard Wolf is nocturnal, but, unlike them, its food consists of insects and reptiles, as well as small animals and birds. The skins are little sought after for *kaross* making. It is hunted when come across with the Bechuanaland Border Police hounds, and affords very good sport.

The Cape Hunting Dog (*Lycaon venatica*).—*Vilde Honde* of the Dutch.

[*Height about 27 inches. General colour, unevenly blotched with large irregularly shaped black, white, and yellow patches, strongly resembling the foxhound; indeed, at a distance both packs would scarcely be distinguishable; body lanky and sloping slightly away towards the stern; legs long and proportionally slender; head very much Hyena shaped, but narrower and longer towards the muzzle, which is black; ears remarkably large, broad, and nearly rounded.*]

IN its appearance and characteristics the Hunting Dog very strongly resembles the Hyena, and indeed Burchell's mistake in describing it as the *Hyæna picta* may well be excused, as the difference exists only in dentition and anatomical structure. In the sparsely inhabited portions of the Cape Colony, particularly in a North-westerly direction, some few packs of these animals still remain, and which depend entirely for their existence on the contributions exacted from the sheep and goat kraals of the far scattered farmers. In the Northern portion of the Transvaal and the Western half of Bechuanaland, they are more common. Excepting, perhaps, Natal and the Orange Free State, they are to be found in more or less numbers

almost everywhere South of the Zambesi, but as it is only in the most unfrequented places that they are about in the day-time, it cannot be said that they are very often seen even in their most common resorts. On account of the dreadful depredations committed amongst all sorts of cattle by Wild Dogs, there is no animal held in such utter detestation by the farmers and natives in remote places in South Africa, and their attacks are carried on with such cunning, activity, and ferocity, that it is seldom an opportunity of obtaining revenge occurs. If a pack, which sometimes may number as many as 30, once enter a sheep kraal during the night, they will never leave it (unless disturbed in the meantime) without having slaughtered every living thing in it, and before the first glimpse of dawn appears, will probably be 20 miles off. No antelope is safe from assault, and Mr. Selous was on one occasion an eye witness when a Wild Dog singly attacked a full-grown Sable Antelope bull. Its audacity may not possibly be very much exaggerated when some persons go so far as to assert that the joint efforts of a pack have been successful in overcoming the Lion. However, whatever may be the case with other animals, although they do not in unfrequented places appear to dread the sight of man, on winding one they clear off very quickly. It has been alleged that the Hunting Dogs are in the habit of excavating burrows, but this is extremely doubtful. It is well known, however, that the premises of the ant-bear (*Orycteropus capensis*) are annexed by them as habitations, especially at such times when the females are whelping, but one of these burrows is sufficient in size to accommodate quite a large family. In running down their prey, they hunt by sight equally with scent, and on viewing a victim, perhaps three or four from the pack will start off in advance, as if to "make the running," while the remainder follow more leisurely behind on the scent of those in front, and by constantly relieving each other in batches, without a great deal of exertion, thus tire out and run into the hardest running antelope. When not strong enough in numbers to pull down such a large animal as the Eland, they adopt the tactics of dashing in now and then, and by snapping at the tendons of the hind legs, endeavour to ham-string their prey before finally worrying it to death. They utter a sort of barking whine.

The Black-backed Jackal (*Canis mesomelas*).—*Silver Jackal* of the Colonists; *Pook-ooe* of the Bechuanas.

[*Height about 17 or 18 inches. In the adult animal, a well-defined patch extends over the entire back, becoming almost coal-black in winter, and which mark resembles in shape and appearance that peculiar to the Airedale terrier; under portions bright orange, sometimes with numerous white hairs intermixed; feet black; head greyish brown; body rather slender; legs long; nose sharp; ears pointed and erect, under portion of tail black, tipped with same colour, fairly bushy.*]

In summer the white hairs in the fur of this animal wholly predominate, giving it a silvered appearance, from whence is derived the name of the "Silver Jackal," by which it is commonly known in South Africa. Hence it may be observed that the varieties of these animals found in the South seem to adopt as the seasons change quite a contrary variation of colouring to those of the Northern hemisphere. The "Silver Jackal," which is the largest and most common of the South African Jackals, is distributed in more or less quantities all over South Africa, but, as may be imagined, it is far more numerous in the Interior. In North Africa and India Jackals are said to hunt in packs, but this does not appear to be the case with any of the varieties frequenting those portions of the country now under notice. Indeed, it is rare to observe more than two or three together, except, of course, when a lot may assemble around a carcass. Such stories as that they are providers for the Lion may be considered as pure fables. Nocturnal in habits, their usual prey consists for the most part of feathered game, small animals such as Hares, and the young of the smaller antelopes. During the day, instead of withdrawing to their burrows, they prefer to lie in the cover afforded by the thick grass and bushes.

Very good sport may be enjoyed during the months of March, April, May and June with the hounds of the Bechuanaland Border Police, of which Colonel Sir Frederick Carrington is Master, the kennels being at Vryburg, the meets coming off about three times weekly. The pack, although a nondescript one, composed both of foxhounds and harriers, will hunt indiscriminately Steinbucks, Duikers, or the different species of Jackals. As affording the best scent the latter are preferred, and if met with in a bit of country free from burrows, many a good half-hour's gallop has and may be had early in the mornings before the heat of the sun interferes with the scent and renders further hunting impossible. On the flats near

Capetown the monotony of existence may be pleasantly broken by an occasional run with the Cape hounds, which are kennelled at Wynberg; whilst another good pack is kennelled at Kimberley, in Griqualand West. In other respects, from a sporting point of view, the Jackal does not deserve further mention. The fur of the species now referred to, although of little mercantile value, is highly thought of when made into *karosses*, owing to its beautiful contrasts in colour.

The Motcluse Jackal (*Canis lateralis*—Sclater).—*Motcluse* of the Bechuanas.

[*In size something smaller than the last described. Body thick and round; legs and ears shorter, the latter being less pointed; the fur, which stands almost erect, is long, thick and fluffy, of a uniform grizzly brown, a distinct darker streak running along the sides and thighs; the points of each hair minutely tipped with grey; feet and ears black; tail uniform blackish brown, very thick and bushy, tipped with white.*]

This Jackal does not appear to be found South of the Orange River, but it is rather common throughout the Interior. Its habits are similar to *C. mesomelas*.

The Long-eared Fox (*Octocyon megalotis*).

[*Height about 17 or 18 inches. General colour, iron grey; tail bushy, tipped with black; body slender; legs long; ears extremely large, erect, and less pointed; muzzle grey, long, and very sharp; fur thick and close.*]

This animal is rarely found in the Cape Colony, being, however, more common in the Interior, although not now considered plentiful anywhere. The natives assert that the food of this species consists only of insects, principally termites and ants.

The Hare Jackal (*Canis chama*).—*Haas Jackal* of the Dutch.

[*Smaller in size than the last described; ears long and pointed. General colour, bluish grey, each hair annulated at the tips; fur very soft and close; underneath portions fawnish.*]

This species is common in the Interior. The fur is the only one of the South African Jackals which, properly, has a mercantile value.

GAME BIRDS.

General Remarks.

[The Dutch term for all ground-roosting Francolins and Sand Grouse is *Patraise* (partridge); tree-roosting Francolins, *Phaysaants* (pheasants); Wild Duck, *Vilde Hunders;* and Wild Geese, *Vilde Hanse.* The Bechuanas call the Francolins *Le shogho,* singular; *Ma shogho,* plural; Wild Duck, *Di hudi;* Wild Geese, *Di peele-peele.*]

In referring to those varieties of game birds frequenting the Cape Colony, Natal, and Bechuanaland, it must be understood that at the present time no decent free shooting is actually obtainable in these countries. Strict game laws are in existence, and close seasons have been fixed, for all descriptions of feathered game, the varieties of the Black Khoorhan—*Otis afra* and *O. afroides*—for some unexplained reason being alone excepted. The owners of the soil, both English and Dutch, as a rule preserve the game on their properties, and any person found shooting without permission is just as liable to legal prosecution as anyone offending in the same manner in England. The breeding season of the different varieties of feathered game is extremely irregular all over South Africa, and the close times vary so much in almost every district that space would not permit of the different periods being set out in detail. A proclamation appeared recently in the Bechuanaland *Government Gazette*, amending the game laws to the effect that the word "game" should include Wild Duck, Wild Goose, and Snipe, and fixing a uniform close season within the territory from the 1st day of September to the last day of February. Although laws referring to the subject exist in the Transvaal and the Orange Free State, they do not appear to be much enforced; and if the Dutch farmers themselves are not very enthusiastic in the preservation of winged game, they are exceedingly jealous of strangers, and more particu-

larly of "*rooi neks*" (Englishmen) trespassing without the requisite permission. In the independent native territories further North, where birds are very plentiful almost everywhere, no opposition to the sportsman is ever entertained by the natives.

In reference to the matter now under consideration, the first question likely to arise will be regarding the most suitable description of sporting dog for general all-round work in Southern Africa. On this particular point there is really no difference of opinion. Setters are incapable of any great or continued exertion under a semi-tropical sun; their feet, moreover, are very liable to become sand cracked, and on these grounds pointers are much to be preferred. The Francolins, with little exception, are very difficult to flush, and will, as a rule, seek safety by running on the ground in preference to getting on the wing. For this reason many sportsmen are unwilling to go to the expense or trouble of obtaining very highly bred or trained dogs, as they are likely to get completely spoiled in their work; and there are very good grounds for this belief, when it is remembered that a day's bag as a rule will be of a very mixed description, and will generally include, in addition to Francolins and Hares, several varieties of the Bustard tribe and some of the smaller antelopes. Many instances are sure to happen in which the only chance of bagging a wounded buck will rest on the speed and determination of the dogs, and under such circumstances, as may be imagined, they never will, and are rarely expected to pay much attention to the words "down shot" or "to heel." In any case it is a matter of impossibility to get the best trained animals in the world to stand calmly and unruffled the singularly (to them) seductive voice of the varieties of the Black Khoorhan; and under ordinary circumstances the employment of such with the fleet-footed Guinea Fowl would simply mean ruination. When shooting over a thick bush country, cockers are preferable to either pointers or setters.

Experience will prove that the Francolins and Sand Grouse—although perhaps not so wild or more difficult of approach in the ordinary sense as feathered game in England of a somewhat similar description—one and all possess greater vitality, and require, so to speak, more shooting. In consequence, a proportionately heavier sized shot should be used in killing them.

The question of cartridges is important, as one cannot always depend on obtaining them fresh and of the right description, ready

loaded. It will be found expedient, before starting on a trip of any lengthened duration, to become possessed of the usual reloading implements and the requisite material, filling the empty cases as may be required. To avoid any annoyance when shooting in the Interior, black powder should alone be used, as the nitro-compounds are too much subject to climatic influence.

Before concluding this subject, some remarks on a few of the numerous enemies which the game birds of South Africa have to contend with may not be out of place. Some give credit to the secretary bird (*Serpentarius secretarius*) as a snake exterminator. It may possibly content itself, when other food is unobtainable, with a diminutive reptile or snake, as will several of the hawk and eagle tribe, the bateleur or short-tailed eagle (*Helotarsus caudatus*) being an even more formidable antagonist in this respect. The natives term this bird *Bulai-nogha* (snake-killer) or *Peekeewe*. Although opinions differ, those who really have had proper opportunities of judging will say that the secretary bird should itself be exterminated whenever occasion offers, as it is not only a most destructive enemy to the young of all feathered game, but also to the young of the smaller antelopes and Hares. Instances of its susceptibility to this description of food are too numerous to mention, while others can be adduced in which these gay deceivers will most carefully avoid coming into contact with even small snakes.

It is to be regretted that the Governments of the Cape Colony, Bechuanaland, and Natal do not put into force a stringent law defining the number of dogs that may be owned by individual natives. Every Kaffir herd throughout the countries mentioned is usually attended by sometimes as many as eight or nine pariahs, and the destruction of feathered game is consequently enormous, the young birds having little chance of maturing. A tax on every dog owned by a Kaffir similar to that imposed upon white men would soon rid the country of the pest, and prevent the birds from becoming extinct by the wholesale and in-and-out-of-season slaughter that everywhere prevails.

FRANCOLINS.

The Cape Redwing (*Francolinus levaillanti*). Fig. 48, Plate XI.

[*Size considerably larger than the common English partridge, the figure proportionately longer and more slender. General colour of back and wings brownish grey, each feather streaked in the centre with pale yellow or fawn, and barred with darker brown. Top of head umberish; breast and belly highly variegated with dark red and brown streaks; a distinguishable band of white feathers tipped with black extends over each eye, and passing downwards meets at the base of the back of the neck; another band of the same colour commences under each eye and meets on the breast; the inside of wings reddish, from whence it derives its name, the "Redwing;" legs and feet bluish yellow. The adult male birds spurred, old females occasionally so.*]

This well-known Francolin may be found all over South Africa as far North as the Crocodile, but is met with more plentifully South of the Orange River than in the Transvaal or Bechuanaland, another closely allied species, also called the "Redwing" (*F. gariepensis*), more or less taking its place in the latter territories. It does not prefer any particular description of country, and may be found in coveys from six to twelve in number frequenting alike the open flats, hill sides and valleys, but not generally in a thickly wooded locality. It often strays long distances from water, and consequently the question has been raised as to whether it is a daily drinker or not. Having the widest range, and being more readily flushed than other species, it affords excellent sport when shot over dogs, and may be said to take the place of the English partridge in South Africa in a sporting point of view. When flushed, all the birds do not as a rule rise simultaneously, but generally get up in odd ones, thus affording opportunities to the pot hunter, should he so desire, of accounting for an entire covey without much difficulty. When marked down for a second time, they are difficult to rise again, and the natives, taking advantage of this, and assisted by their mongrels, kill them easily with knobkerries. The call—"chirakeely"—which is uttered towards daylight and sundown, is a quick succession of

shrill but pleasing tones. This Francolin is a ground rooster, and has only been known to take rufuge in trees when actually wounded. The flight is strong without being very rapid. The flesh, even in the old birds, is white, tender, and remarkably well flavoured.

The Orange River Francolin (*Francolinus gariepensis*). Fig. 50, Plate XI.

[*Size, shape, and appearance so strongly resemble the last described that it requires a close examination to detect any difference. The general colour throughout, however, will be found to present a brighter and more highly variegated appearance, the legs are comparatively shorter, while the tail is broader and longer. It is also thus distinguished from* F. levaillanti:—*Reddish brown takes the place of umber on the top of head; the under line of mottled black and white feathers encloses the throat, which is white; the upper line, also of black and white, disappears on the side of neck without meeting.*]

This species is not found any considerable distance South of the Orange River, its range Northwards extending as far as the Zambesi. Andersson states that in the high table-lands of Damaraland and Great Namaqualand it is quite common. In Bechuanaland and the Transvaal it is equally termed the "Redwing" partridge with *F. levaillanti*, and its haunts, habits, characteristics and call being in every way similar to that species, extended reference is unnecessary.

The Greywing Francolin (*Francolinus afer*).

[*Size almost the same as, and at a distance somewhat resembles, the English partridge. The colour generally is ashy grey; back covered with darker blotches and reddish brown cross bars, the feathers streaked with pale brown; throat and stripe extending from behind the eye down the neck to shoulder, white, tipped with black; a reddish band mottled with black runs over the top of the head and down the centre of back of neck; bill black, long, and curved; tail barred with dark and reddish brown. Males and sometimes old females spurred.*]

This bird is principally found in the mountainous districts of the Cape Colony and Natal, but it occurs also in the Orange Free State and the Transvaal. In Bechuanaland, Matabeleland or Damaraland, it is unknown. The coveys generally average about ten or twelve

birds, and when flushed in the valleys at once make for the declivities of the mountains, and concealing themselves amongst the stones are extremely difficult to find again. This species is not tree-roosting. The flesh is very good.

The Brown Red-necked Francolin *(Pternistes swainsoni).*—Fig. 49, Plate XI.

[*Size and weight about the same as a large English cock grouse. Body square and thick set; throat and space round eyes bare of feathers, showing the skin, which is of a bright purplish red; upper portion of body and wings dark dirty brown, feathers streaked in the centre and slightly mottled with a darker shade; breast and belly undecided greyish yellow; feet slatey black.*]

The range of this species does not extend South of Potchefstroom in the Transvaal, or Mafeking in Bechuanaland, but further North it may be found generally up to the Zambesi. It will be met with in a grassy country dotted over with brushwood, always in the immediate vicinity of some river or water-pool, and in the morning and evening it emerges from the cover and feeds out in the more open patches, where, if startled, instead of flying it usually runs with great rapidity to the shelter of the nearest jungle, from the cover of which, once gained, it is most difficult to dislodge; it is also very partial to low-lying swampy ground in which there are reed patches. Roosting in the night on the branches of the tallest trees, early in the morning and late in the evening it is generally observed perched on some stump of dead wood, from whence it utters the easily recognised hoarse and frequent "gro-o-o-o-ak." Old disused native cattle kraals are also very much resorted to by this species. As has already been mentioned, all the varieties of Francolins possess great vitality. This species in particular excels in this respect, and it is astonishing what an amount of shot they are capable of carrying away. The flap of the wings in flight strongly resembles the English pheasant, and (particularly when making down wind) it flies with great rapidity. Any sort of cur will do to put it up, but the employment of trained sporting dogs will generally be found useless in the thick bush to which they resort when disturbed. They are rarely met with in coveys. The flesh of the young birds is very good, that of the old ones being exceedingly tough.

The Pileated Francolin *(Francolinus pileatus).* Fig. 52, Plate XI.

[*Size a little smaller than the Redwing. General colour above, light reddish brown, each feather having a very distinct white stripe down the centre; head crested; breast and belly pale bluish yellow, the lower portion of the former being regularly marked with large liver-brown spots; legs deep red; bill black.*]

THE Pileated Francolin is somewhat suggestive of the French red-legged partridge, and is first met with Northward on the main road to the Zambesi in the Bamanwaketsi or Kanya country, in Bechuanaland, the range extending to the Northern portion of the Transvaal, and throughout Damaraland and Matabeleland. Its favourite haunts are on the slopes of some timbered, stony *kopjie*, the bird being often discovered at considerable distances from water. It is to be found in small coveys, and, like the last mentioned Francolin, it is difficult to flush, when pursued by dogs invariably taking refuge in the branches of trees, from whence, with crest and tail erect, as if fearless of danger, it gives vent to its harsh, metallic and far-resounding "chi-ra-ka." The flesh is excellent.

The Coqui Francolin *(Francolinus subtorquatus).* Fig. 51, Plate XI.

[*Size about the same as a very small partridge, and somewhat resembling the Redwing in appearance, the colouring, however, being much duller; two dark lines above and below the eyes; under portions dull white, lightly tinged with yellow, barred with brown; base of bill, legs, and feet golden yellow; all the feathers more or less marked with a white stripe down the centre.*]

THIS is the smallest of the African Francolins, and is found in Natal, but it is very common in the Northern portions of the Transvaal, Bechuanaland, throughout Matabeleland, 'Ngamiland, and Ovamboland. It generally frequents broken country covered with low, scrubby, but not very dense, bush in the vicinity of water. Although a ground-roosting bird, it will very often when flushed by dogs take refuge in trees. It is usually met with in coveys of from ten to fourteen, which afford good sport with trained dogs. The flesh is quite white and very delicious, excelling that of any other species of Francolin.

The Red-billed Francolin *(Francolinus adspersus).*

[*Size about the same as the Redwing, resembling much in appearance the Noisy Francolin* (F. clamator) *of the Cape Colony. Uniform colour, dark shining grey; entire surface covered with minute, narrow, wavy, and closely-placed whitish lines; head crested; bill and legs bright red.*]

Known in the Interior of South Africa as the "Silver Partridge," these birds are said at one period to have frequented the country so far South as the Orange River; if so, it must have been only in its extreme Western limits. At the present time, however, it is only found in the far North of the Transvaal and Bechuanaland, and from thence to the Zambesi. It is common along the Crocodile, Marico, and Notwani Rivers, and very abundant on the Botletle, around Lake 'Ngami, and throughout Damaraland and Ovamboland, only being met with, however, in the very thick thorn bush immediately skirting the river banks. Although the most difficult of the whole tribe of Francolins to flush (and when they do rise on the wing it is only for the purpose of concealing themselves in the branches of some very thick bush), they are not by any means shy in disposition, as the coveys, which usually consist of a dozen birds, will, if undisturbed, occasionally be noticed feeding on the refuse corn inside the occupied native kraals.* The voice is peculiar, and can at once be recognised without any difficulty. It consists, so to speak, of a succession of loud maniacal shrieks, increasing in volume to a point at which they end suddenly.

The Cape Red necked Francolin *(Pternistes nudicollis).* Fig. 43, Frontispiece.

[*Size considerably smaller, but in shape and appearance very much resembles its Northern congener* (P. swainsoni). *General colour above, a rich dark brown; the centre of each feather striped with a darker shade; breast and belly almost black, covered with frequent broad and prominent white stripes; throat, chin, and space round eyes devoid of feathers, the skin of which is bright purplish red.*]

The range of this Francolin is limited to some of the thickly wooded Western maritime districts of the Cape Colony, Pondoland,

* Mr. Nicolls has on several occasions, when fishing along the Botletle River, observed these birds approach to within a distance of three or four yards in a calm and unconcerned manner.

Plate XI.

Fig. 48.—The Redwing Francolin (*Francolinus levaillanti*).

Fig. 49.—The Brown Red-necked Francolin (*Pternistes swainsoni*).

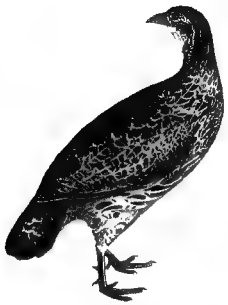

Fig. 50.—The Orange River Francolin (*F. gariepensis*).

Fig. 51.—The Coqui Francolin (*F. subtorquatus*).

Fig. 52.—The Pileated Francolin (*F. pileatus*).

Fig. 53.—The Natal Francolin (*F. natalensis*).

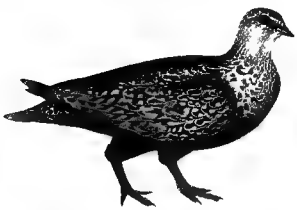

Fig. 54.—The Yellow-throated Sand Grouse—Female (*Pterocles gutteralis*).

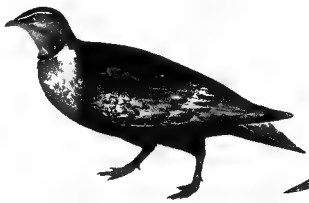

Fig. 55.—The Yellow-throated Sand Grouse—Male (*P. gutteralis*).

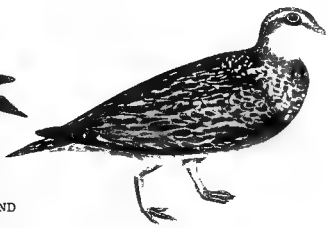

Fig. 56.—The Variegated Sand Grouse (*P. variegatus*).

Fig. 57.—Pucheran's Guinea Fowl (*Numida pucherani*).

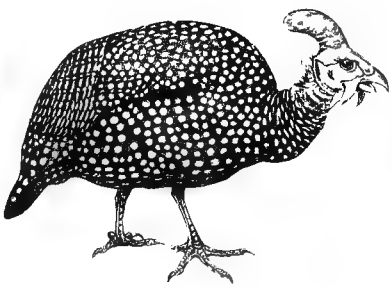

Fig. 58.—The Common Guinea Fowl (*N. coronata*).

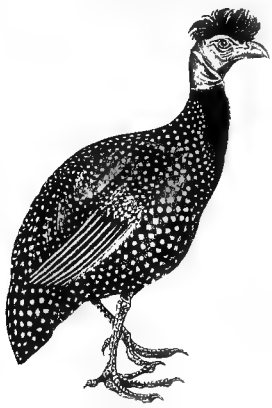

Fig. 59.—Verraux's Guinea Fowl (*N. Verrauxi*).

and the Eastern borders of Natal. Its habits, call, and characteristics are very similar to the Brown Francolin. It is not by any means a common species.

The Noisy Francolin (*Francolinus clamator*). Fig. 42, Frontispiece.

[*Considerably larger in size, but very much resembling the Red-billed Francolin* (F. adspersus). *Uniform colour, dark greyish brown, each feather marked lengthwise with narrow streaks of greyish white; chin and portions of the throat white; feathers of the neck edged with white; belly almost black, each feather having a broad white stripe down the centre.*]

This is the common "pheasant" of South Africa. It frequents the kloofs and wooded districts of all the maritime portions of the Cape Colony and Natal. Its utterance is particularly harsh, loud, and resounding, somewhat like that of the Red-billed Francolin, and like that bird, when startled it will at once take refuge in the branches of trees; but when driven out into the open it affords excellent sport, and is quite the commonest game bird met with along the sea coast. Its flesh is deservedly esteemed.

The Natal Francolin (*Francolinus natalensis*). Fig. 53, Plate XI.

[*Considerably smaller than the Brown Francolin. The upper portion of body paleish brown, mottled with a darker and lighter shade; neck, breast, and belly, dirty white and spotted with dark brown; feet, legs, and base of bill orange.*]

The Natal Francolin—called by the Dutch the "Namaqua Pheasant"—may be found in the mountainous portions of the North of Natal, the Transvaal, Bechuanaland, and some parts of Matabeleland, but nowhere in any great numbers. They are rarely met with in coveys. It is a very shy and wary bird, and in its most accustomed resorts is not often seen. Its habits are similar to the Brown Francolin.

Shelley's Francolin (*Francolinus shelleyi*).

[*Resembles* F. levaillanti *and* F. gariepensis, *but can be distinguished by the middle and lower breast and belly being white, irre-*

gularly marked transversely with wide black bars; the feathers of the upper breast rufous chestnut, marked and barred transversely with black; legs yellow.]

THE above Francolin is so described by Mr. W. R. Ogilvie Grant in Vol. II. of the *Ibis*, 1890, under the heading of "New and Rare Francolins." It is found in Natal, Swazieland, and Northern Matabeleland.

QUAIL.

The Common Quail (*Coturnix communis*).

[*Above, brown, variegated with grey and black, the shafts of many of the feathers with a broad white stripe; head dark brown, with a light buff stripe down the centre and over each eye; throat and chest deep rufous, the former in the male with a black patch down the centre, the latter with faint whitish lines down the shafts of the feathers; flanks longitudinally richly variegated with dark brown black and pale buff; belly, light yellowish brown, immaculate.*— Layard and Sharpe's *Birds of South Africa.*]

THE Common Quail is met with in far greater numbers in the lower divisions of the Cape Colony, the Transvaal, and Natal than further North. The migrations to South Africa usually commence about the month of August, but depend almost entirely on the rainfall. In those parts which have been affected by a drought of any lengthened duration their presence is wanting; while in others in which wet weather has been experienced, they are found in countless numbers, and afford excellent sport when shot over sporting dogs.

The Harlequin Quail (*Coturnix delegorguei*).

[*Size considerably larger than the Common variety.* "*Above, fuscous cinereous, with black and white transverse markings; feathers of the back and the wing coverts marked with longitudinal white patches, bordered and centred with black; top of the head and neck brown; eyebrows and a little mark on the top of the head white; a short band between the nostrils and the eye, and others*

beneath the eyes black; throat and fore part of neck white; . . . the greater part of the chest black; belly intense rufous, larger spots black; under the wings white; bill black; legs yellow."—Layard and Sharpe.]

THIS species is to be met with throughout South Africa generally, but nowhere plentifully. Its habits are similar to the last described.

Adanson's Quail (*Coturnix adansoni*).

THIS can scarcely be termed a South African bird, as its visits are of such extreme rarity, and for this reason it is passed over with the brief remark that the general colour throughout has a bluish tinge.

The South African Hemipode (*Turnix hottentotta*).

[*This and the two following varieties may be distinguished from the true Quail by the absence of the hind toe. Size a little larger than the Common Quail. "General colour, variegated black, brown, and white, the colours so disposed on each feather as to make the bird appear scaley; sides of the head, chin, throat, and breast clear rufous, the sides of the latter variegated with black and white bars; belly and flanks albescent.*"—Layard and Sharpe.]

FOUND in the lower portions of the Cape Colony and Natal, but is seldom met with. Its habits are identical with the under-mentioned variety.

The Kurrichane Hemipode (*Turnix lepurana*).

[*Size a little exceeding that of a sparrow. "Above, ground colour intermediate between pale rufous and light chestnut . . . on the neck, back, and shoulders numerous slender blackish brown bars or irregular crescents . . . chin and throat dull white; middle of breast pale Dutch orange . . . sides of breast and belly white, with a yellowish tinge; each feather with a narrow shaped brown spot near the point.*"—Layard and Sharpe.]

THIS diminutive little game bird is known in Bechuanaland and the Transvaal as the "Button Quail," and scarcely exceeds four inches in length. It is found rather plentifully in the Transvaal, Bechuanaland, Namaqualand, and Matabeleland, but is only an occasional

visitor to the Cape Colony. It frequents in beveys up to twelve in number long rank grass valleys in the neighbourhood of temporary pools, periodical watercourses, and old disused mealie and Kaffir-corn fields. It is rare to flush more than one at a time, and they run in and out through the long grass with great rapidity, considering their size, when hard pressed lying so very close as to almost allow of their being trodden upon before taking to the wing. Even when assisted by a good dog, it is almost impossible to flush a second time. The flesh is delicious.

GUINEA FOWL.

The Crowned *or* **Common Wild Guinea Fowl** (*Numida coronata*). Fig. 58, Plate XI.—(*Tarantal* of the Dutch; *Di-cawka* of the Bechuanas.)

[*Larger in the horny crest, heavier in the body, darker in colour, devoid of any white feathers in the wing, but otherwise strongly resembling the domesticated bird.*]

The Wild Guinea Fowl is still preserved in many parts of the Cape Colony, Natal, and the Orange Free State, and is very plentiful between these countries and the Zambesi. Along some of the rivers in the Interior, such as the Botletle, Okavango and Crocodile, it is found in enormous quantities. During the winter or dry season of the year it is very gregarious, and at such periods may be met with in flocks amounting to several hundreds. Although these birds in the course of a single day will often wander more than twenty miles in search of food, they are invariably found in the neighbourhood of water, to which they always return at nightfall, selecting some high and thick bush or tree for their roosting place. Their presence is generally indicated by their utterance of a sharp metallic "chir-rir-rir-rir-rir," which can be heard a long distance. On being disturbed, the Guinea Fowl does not, as a rule, at once take to the wing, but starts running at a pace so rapid that it is often necessary to ride a horse at a stiff canter in order to keep on level terms with them—and this notwithstanding the long rough grass and low bush. If the flock can first be scattered by the aid of any sort of cur, they will then tree or lie sufficiently close in the grass to be "walked up." It is then, and only then, that the assistance of a well-trained sporting dog becomes valuable, and very large bags can

be made. The "pot hunter" selects the time immediately before darkness for his operations, and having taken up a position near some favourite roosting place, a shot into the brown generally proves disastrous to the unfortunate birds. As an example of how game, not alone of this but of every other description, in South Africa is gradually becoming decimated through wholesale and useless slaughter, which cannot be too strongly condemned, it may be mentioned that some years ago a party numbering over twenty, and including several well-known "sportsmen," when on a trip along the Notwani River (a tributary of the Crocodile in Bechuanaland Protectorate), unnecessarily subsisted for over fourteen days almost entirely on the livers of Guinea Fowl, the remaining portion of the bodies being generally thrown away. The flesh of the young bird is white, and excellent in flavour.

Verreaux's Guinea Fowl (*Numida verreauxi*). Fig. 59, Plate XI.

[*Body black, with greenish tinge, and spotted with greenish white; head adorned with large upright jet black velvety feathered crest; throat, red; neck, blue.*]

This bird inhabits the dense bush in the low-lying and unhealthy country on the East Coast South of the Crocodile River, and was at one time plentiful in Natal, but it is only occasionally that a specimen can be obtained there now.

Pucheran's *or* **the Zambesi Guinea Fowl** (*Numida pucherani*). Fig. 57, Plate XI.

[*Almost identical with the last described, with the exception that the spotted plumage is continued on the breast to the throat.*]

Found rather plentifully in the bush belts along the Zambesi, and some very beautiful specimens have been brought from that river by Mr. Francis, the well-known trader, and domesticated on the Crocodile.*

SAND GROUSE.

The Namaqua Sand Grouse (*Pterocles namaqua*).—*Namaqua Patraise* of the Dutch.

[*About the same size, and very much resembling in appearance and in manner of flight the common English grey plover. General colour, greyish brown; throat, dirty yellow; feathers of back mottled with dark brown and bright buff, each one marked with a purplish spot; wings, blackish brown; two bands divide the breast from the belly, the upper dirty white, and the under, rufous; belly, purplish; two or three of the tail feathers long and running gradually to a sharp point; legs, feathered.*]

THE Namaqua "Partridge" (under which name it is always designated in South Africa) is very common indeed throughout all the Karoo districts of the Cape Colony and Little Namaqualand, but it seldom occurs much South of the Hex River Pass. Although plentiful in Griqualand West, it becomes less so Northward, and in the lower portions of the Transvaal and Bechuanaland gradually gives way to another species somewhat similar, and known as the Double-banded Sand Grouse (*P. bicinctus*). It is generally met with in pairs, and frequents the red sandy plains so common to the country, feeding principally on the very small black and hard seeds of a species of creeping plant indigenous to the arid wastes. When squatting on the ground it can only be distinguished with difficulty, and will permit of very near approach before rising on the wing, which it does with startling commotion. The flight, however, being rapid, and at first irregular, it is not by any means a very easy bird to bag. During the winter months, when the summer rain-pools are exhausted, the Namaquas and two other varieties of Sand Grouse gather indiscriminately together, and resort morning and evening in large flocks to the permanent dams and *vleys*. The flights occur between eight and half-past nine in the morning, and for half-an-hour before and ten minutes after sun-set, at which time their approach is heralded by their incessant sharp cries, "chuck-a-wee," which is only uttered while on the wing. Before drinking they fly round in repeated circles, and then descend almost perpendicularly to the water with such velocity as to cause a hissing sound, and, delaying only for a short time after drinking, are again off to their feeding grounds. Some of the permanent water pans in the Karoo, Damara-

* In the *Proceedings* of the Zoological Society of February 18, 1890, Dr. P. L. Sclater remarks that the "Guinea Fowl of the Zambesi referred to by Capt. Sterling, Mr. Elliot, and Dr. Sharpe as *N. pucherani* is not that species, but is a species more closely allied to *N. cristata*." There are specimens of this bird at present in the Zoological Gardens.

land, and the Kalahari are frequented by the different varieties of these birds in extraordinary numbers, and as many as fifty have been potted with a right and left shot while drinking along the margins. The flesh of all the Sand Grouse, with, perhaps, the exception of the Yellow-throated species (*P. gutteralis*), is exceedingly tough, but may be slightly improved by skinning, which operation should only be performed immediately before cooking. When baked the improvement is more marked.

The Double-banded Sand Grouse (*Pterocles bicinctus*).

[*Size somewhat smaller than the last described, which, however, it resembles very much in general colour, the second band between the breast and belly being black in place of reddish brown; white patches over the eyes; back, less mottled in appearance and wanting in the purplish spots; belly, dirty white; legs, feathered.*]

This is the most common of the Sand Grouse of the Transvaal, Bechuanaland, Damaraland, Matabeleland, and the Kalahari, but it does not range South of the Orange River. Its habits are in every way identical with the Namaqua, it being almost impossible to distinguish the voice of one from the other.

The Variegated Sand Grouse (*Pterocles variegatus*). Fig. 56, Plate XI.—(*Gheel Patraise* of the Dutch.)

[*Size the same as the Namaqua Sand Grouse. General colour above, light olive, profusely covered with small white spots and here and there dashes of canary yellow, the latter colour appearing in the bare space round the eyes; breast, purplish brown, well spotted with white; wing feathers tipped with white; legs, feathered.*]

In common with the Double-banded variety, the "Golden Partridge" frequents the countries North of the Orange River, South of which it is only very rarely met with. Its habits are also similar to that just mentioned, except, perhaps, that it only delays for an instant at the water when drinking, the note, moreover, being less sharp and piercing. When proceeding to the *vleys* in the morning and evening to drink, this variety intermingles freely with the two already described, and it is not by any means uncommon, after firing a charge of shot into a flock, to find the bodies of the three species at the same time among the slain.

The Yellow-throated Sand Grouse (*Pterocles gutteralis*). Figs. 54-55, Plate XI.—(*Naacht Patraise* of the Dutch.)

[*Size same as a large English partridge. Back, light brown, approaching to reddish brown on the wings; chin, throat, and sides of head canary yellow; a single dark brown crescent-shaped band runs across the upper portion of breast, which is ashy yellow; belly, rich reddish brown; legs, feathered.*]

THIS species is found in portions of the Transvaal, Bechuanaland (rarely South of the Molopo), Matabeleland, and Mashonaland. It is probably unknown in Damaraland; at all events it has not been observed at any of the large *vleys*, such as Lehutatoo in the Central Kalahari, and which is frequented by other varieties in thousands. It is not met with anywhere very far removed from water, and, unlike other species of the Sand Grouse, has no regular drinking hour, being often observed approaching the water long after sundown. In flocks generally of about half-a-dozen it will usually be found resorting to the corn lands, and appears to be extremely partial to Kaffir-corn, on which food it principally subsists. The flight is excessively strong and rapid, while its note—only uttered on the wing—is a harsh, loud "gluck," which can be heard a long distance. From the nature of its diet, the flesh is far preferable to that of any of its congeners.

BUSTARDS.

The Kori Bustard (*Otis kori*).—*Ghaum Paauw* of the Dutch; *Kori* of the Bechuanas.

[*General colour above, minute wavy lines of mottled brown and grey, getting lighter and approaching white on outside of wings, which are covered with uneven dark-coloured patches; some of the quill feathers tipped jet black; head and neck minutely mottled with white, tipped with grey, approaching black on skull; large tufts of feathers on head directed backwards, tipped with black; breast and underneath, white; legs, bluish yellow.*]

THE Paauw is the largest and noblest-looking game bird in existence. It is still sometimes, but not frequently, to be met with in the Karoo Belt extending South of the Orange River and in the

Northern portion of the Cape Colony, the borders of Natal, Zululand, and the Orange Free State, but is quite common in the Transvaal, Bechuanaland, and Damaraland, its range extending to the Zambesi. Its most favourite haunts are flats which at one time have been under cultivation, as well as in bare open plains which are dotted over with low mimosa bush. It is named the Gum Paauw on account of its predilection for the gum which flows from most varieties of the acacia, but it is not particular as to diet, for in addition to seeds, locusts (on which it grows excessively fat), beetles, and other insects, it has no objection whatever to an occasional lizard or small snake. It is nearly always found in pairs, and chooses its feeding time in the morning and evening hours, lying down during the heat of the day in the cover of some shady bush. Although contrary to the statements of some naturalists, it is nevertheless an undoubted fact that these birds during some of the winter months very often congregate together in flocks numbering as many as twenty. This was particularly observed on several occasions last year in British Bechuanaland, and as there were not any locusts in the vicinity at the time, it is difficult to account for this unusual circumstance.

The Paauw varies considerably in size, the average weight of the adult male being about 20 lbs., but it is not by any means unusual to obtain specimens that turn the scale at 30 lbs., and reliable authorities mention having seen them exceed 50 lbs. The species is voiceless. Although presenting no very difficult mark for a rifle bullet, when feeding on the open flats the Kori is a very shy and difficult bird to approach sufficiently near for the range of a shot gun, and the best plan to adopt under such circumstances, if on horseback, is to ride slowly round at a distance of a couple of hundred yards from the bird and gradually narrow the circle. If this tactic is adopted, it will, like most others of the Bustard tribe, often lie down as if to escape notice, and thus a shot may be obtained, although not without the expenditure of time and trouble. Towards mid-day, when the sun is very hot, and when having their usual *siesta* in the shade of some bush, they are very readily approached, and taking rather a long time to get well on the wing, ready opportunities are offered of sending in both barrels at very close quarters ; but even when riddled with buck shot, they will often fly away out of sight as if uninjured. Although the stroke of the wing when in flight is very slow, yet when well on the move

they are capable of getting along with great rapidity considering their weight. As an instance of the vitality of this bird, one was shot in Bechuanaland some time ago which flew fully half a mile after receiving no less than two bullets from a regulation Martini-Henry rifle clean through the breast. Charges of triple A shot should be used. Water does not appear to be absolutely necessary for its existence, and the same remark applies to all other species of the Bustard tribe found in South Africa. The inner portion of the flesh on the breast when cooked is snow white in colour, the outer nearly black. Both, however, are equally good, and when allowed to hang for a sufficient time, excel that of all other game birds in flavour.

The Stanley Bustard (*Otis caffra*). Fig. 41, Frontispiece.—(*Wild Turkey* of the Cape Colonists.)

[*General colour above, greyish black, waved and streaked with a lighter shade; top of the head black with a white streak down the centre of skull; space around back of neck reddish brown; wings variegated, with large irregular patches of black and white; front of neck slightly mottled with slate, sides of same approaching white; belly, white; tail banded alternately with white and black, the bands being three in number.*]

This species of Paauw is found in the Karoo and Northern portions of the Cape Colony and Griqualand West, and in Natal, but seems to be more common in the Orange Free State. It is unknown in Bechuanaland, Damaraland, or Matabeleland, but a few specimens have been seen in the Transvaal. In the early morning and late in the evening it emits a low melodious humming noise, and in the pairing season the cock birds give vent to far-resounding booms somewhat resembling those uttered by the bittern. Its habits are almost the same as the Kori, but it is inclined to frequent more hilly and stoney districts. The flesh is excellent, and very similar in quality to the last mentioned.

Ludwig's Bustard (*Otis ludwigi*).

[*Size somewhat larger than the last described. General colour above, light yellowish brown, very minutely and thickly waved with a darker shade of the same colour; top of head black; back of neck*

reddish brown, front of same and chest, white ; wings mottled with white and dark brown ; tail barred transversely with four black or very dark brown streaks.]

This Bustard is now getting very rare, but may be met with occasionally throughout the Cape Colony, Natal, and the Orange Free State, and is also said to be an occasional visitor to the Transvaal, but is unknown in the other portions of South Africa. Its habits and resorts are similar to the Stanley Bustard, but it may be met with much more in the coast direction, and it is not long since several specimens were observed on the Cape Flats, within a few miles of Cape Town. The flesh is also very good.

The Black-bellied Khoorhan (*Otis melanogaster*). Fig. 39, Frontispiece.

[*Body long and slender, about double the size of the common Black Khoorhan, the hen bird of which it somewhat resembles in colour. General colour above, mottled ashy grey, covered rather regularly with large black arrow-shaped spots; tail a shade darker than the body, with several small transverse black bands; a large portion of the wings white; a black narrow stripe extends down the front of the neck and joins the belly, which is uniformly of the same colour, black; head considerably crested. The fluffy, pinkish, under down of the feathers fades after death, as in the Vaal Khoorhan* —O. scolopacea.]

This bird is now rare, but it is said to be met with in Natal. On the high plateau of Mashonaland, however, and particularly in the neighbourhood of Fort Salisbury, it is pretty common. In the alluvial plains immediately North of Lake 'Ngami it is also to be found, and is there called by the natives *Kori ea le-claka* (reed Kori). Owing to a thin layer of oily fat lying immediately beneath, it is a very difficult bird to skin. When come across in reeds and long grass it will at first invariably attempt concealment before getting on the wing. Its habits are solitary.

The Black Khoorhan (*Otis afra*).

[*Size of the male bird about that of a cock pheasant, the hen being smaller and lighter in colour. Back, wings, under portion of head, neck, breast, and body velvety black; ears white; back and upper*

portion of wings traversely marked with alternate waves of dark brown and rich yellow; a white collar round base of the back of neck; shoulders of wing white; quills jet black; bill, legs, and feet bright orange.]

In conjunction with the following species this is the commonest of not alone the Bustard tribe but of all the game birds met with in South Africa. It is still very plentiful throughout the Cape Colony, but after passing the Orange River its place is gradually taken by the White-quilled variety (*O. afroides*), and seldom ranges Northward of the Molopo River in Bechuanaland. Although properly termed a solitary bird, when one is discovered others are almost sure to make their objectionable voices heard in the vicinity. On the approach of an intruder, the cock bird, instead of attempting concealment, at once makes his presence known; and perhaps the most familiar sound which is constantly dinned into the ears of the traveller in South Africa is the grating and mocking "go-back, go-back, foot-sack, foot-sack" of the "quarrelling cock." This cry is made by the bird when stationary, and at a distance of complete safety from the object of its alarm. Should an approach be made to a distance at which the Khoorhan might consider his personal safety in jeopardy, he immediately springs into the air, and flying round just out of range, keeps letting off volumes of direful imprecations on the devoted head of his pursuer. The female, on the contrary, is quite of a retiring disposition, extremely difficult to flush, and when wounded or in danger usually seeks refuge in some adjacent ant-bear or meercat hole. It is generally in a disused burrow of the latter animal where she lays and hatches her eggs. She is voiceless.

It may be concluded from the above remarks that on bare open flats the Khoorhan is a very difficult bird to get at, but as they are also well disposed to frequent districts in which there is plenty of cover, large bags can be made, but, strange to say, of every ten birds shot there is usually only about one hen obtained. Although the movement of the wing in flight is quick, the bird's progress is not by any means rapid, and after being flushed it usually rests again at a short distance. Their mode of alighting on the ground is somewhat peculiar, for instead of coming down in the ordinary manner of birds they descend perpendicularly, at the same time extending the feet forward as if feeling the way. Although this Bustard affords fairly good sport, and has the advantage of being met with in parts

not frequented by other descriptions of game, yet, taking it as a general rule, its absence is more desirable than its presence to the sportsman. Sporting dogs are almost valueless as an aid, and the most patient and best trained pointer or setter quickly gets ruined in its pursuit, while its flesh is tough and inferior. If skinned before being cooked, it will be found much better.

The White-quilled Black Khoorhan (*Otis afroides*). Fig. 38, Frontispiece.

[*Size, shape, colour, and voice identical with the Black Khoorhan, with the exception of one distinguishing mark. On the quill feathers being opened (if the outer two are excluded) they are all marked with white.*]

THIS variety does not extend South of the Orange River, but is more common in the Transvaal, Bechuanaland and Damaraland than the Black Khoorhan, its range extending Northward to the Tropic of Capricorn. Reference to the last described will be sufficient in every way for the one under notice.

The Vaal Khoorhan (*Otis scolopacea*). Fig. 45, Frontispiece.

[*Body somewhat larger and legs longer than* O. afroides. *General colour, light reddish brown, streaked and mottled with dark reddish brown and black; head adorned with crest; throat and chin black, surrounded with a creamy yellow edging; the under fluffy portion of all the feathers pink, which fades rapidly after death; a black distinguishing* V *at the back of the head; quill feathers black.*]

THIS bird is occasionally found in the Karoo of the Cape Colony, but is much more plentiful in the Transvaal, Bechuanaland and Damaraland, although its range does not appear to extend so far North as the Zambesi. It generally associates in pairs, but is sometimes discovered in families numbering half-a-dozen, frequenting open sandy grass-covered flats sparsely dotted over with the camel-thorn tree, its favourite haunt, early in the morning and late in the evening, being on the slope of some gentle rise in the surrounding country, at which times its presence may be easily distinguished by its crowing voice "kir-rak-a-rack-a-rack." In the heat of the day it is difficult to discover, and, when found, prefers seeking concealment

to escaping on the wing. The manner of flight resembles that of the Paauw but is much more rapid. It is not by any means very common, but is most abundant on the verge of the Kalahari. The flesh is held in better estimation than the Black Khoorhan.

The Blue Khoorhan (*Otis cœrulescens*). Fig. 40, Frontispiece.

[*Size about one-and-a-half larger than the Black Khoorhan. Colour above, brown with a reddish tinge, very minutely mottled with a darker shade and black; crown of the head, black; cheeks and all around eyes, white; band of black around the throat; front of neck, breast and belly, slatey blue; head, crested; tail feathers tipped with black.*]

In small parties of three or four at a time, and generally somewhere near water, this Khoorhan is still found in the Karoo portions of the Cape Colony and a few districts in Natal, being now very scarce in both countries. It is, however, much more common on the flats in the Orange Free State, and is occasionally spoken of in the Southern part of the Transvaal, but does not frequent any other portion of South Africa. It is not by any means a difficult bird to approach, particularly late in the evening, and its voice and manner of flight very much resemble the Vaal Khoorhan. Flesh rather tough.

The Bush Khoorhan (*Otis ruficrista*). Fig. 44, Frontispiece.

[*Body larger and more thick-set than the Black Khoorhan; head and neck slatey blue; large tuft of purplish red on head; general colour of the upper portions blackish brown, distinctly mottled and barred with rich brown, regularly covered with prominent* V *marks; belly black.*]

This Bustard is unknown in the Cape Colony, and frequents the very thick bush of the Transvaal, Bechuanaland, Matabeleland, and Damaraland. It is solitary in its habits, the most favourite resort being on low, stony ridges or *kopjies* thickly covered with bush. The flight is very quick, and when flushed closely resembles that of a woodcock in the manner of its diving in and out with great rapidity through the bush, presenting by no means an easy shot. In this respect it is not alone different from other birds of the Bustard tribe, but it is very often observed soaring on what is called the "dead wing," and although all the lesser species make some sort

of a commotion when rising, this one does so noiselessly. Mr. Ayres, the Transvaal ornithologist, observes that the Bush Khoorhan gives vent at times to a low, humming noise, somewhat resembling the hoot of an owl. If this is the case, the habit has not generally been recognised. A peculiar incident in connection with this bird which occurred in British Bechuanaland may be worth mentioning. A party of gentlemen were shooting close to Mafeking, when a Bush Khoorhan was repeatedly observed to fly perpendicularly in the air to a height of about forty feet, and there turn a back somersault, falling downwards in a lump, only extending its wings just before touching the ground. The bird was actually shot when performing one of these novel acrobatic feats. The flesh is very fair eating, being better than any other variety of the lesser Bustards.

The Senegal Khoorhan (*Otis senegalensis*).

["*General colour above, bright rufous, variegated with black; tail barred with four cross bars, that near the point being broadest; top of the head black in the male, rufous in the female, minutely mottled and changing into light ash colour at the back; cheeks and chin white; throat and crescent shaped mark at the back of the head, jet black; lower part of throat and breast rufous, with here and there a bluish tinge; large wing feathers black, the rest bright rufous; under parts white, length 16 or 17 inches. It is said to frequent the Transvaal, Natal, and Free State. Doctor Exton procured it at Kanya,* in Matabeleland.*"]

This what must be termed rare species is described as above in Layard and Sharpe's *Birds of South Africa*, and is reproduced by permission of Dr. Sharpe, and must be closely allied to the Vaal Khoorhan (*O. scolopacea*).

Rüppel's Bustard (*Otis rueppelli*).

["*Male, above, clear fulvous, vermiculated with black; crown, ashy blue, rayed with brown; eyebrows and a malar streak, nape and middle of the throat, and longitudinal median band on the forepart*

* Mr. Nicolls resided, off and on, for over twelve months at Kanya (which is in the Bechuanaland Protectorate, and not in Matabeleland), but never met with one of the species.

of the neck, black; sides of the head, white; lower parts, dirty white; first and second quills blackish, rufous white near the base; and others buffy white, with the tip blackish."]

This species is so described in Layard and Sharpe's *Birds of South Africa*, and, according to Andersson, is to be found in Great Namaqualand. The above description is reproduced by permission of Dr. Sharpe.

DIKKOPS.

The Dikkop *or* **South African Thick-Knee** (*Œdicnemus capensis*). Fig. 46, Frontispiece.

[*Size considerably larger than the common Thick-knee found in England. General colour above, light fawnish brown, darker down the back of neck, and approaching dirty white on the lower portion of wings, mottled and streaked all over with dark brown; belly, dirty white; chin and upper portion of neck, white; the shape of the head very much resembles the woodcock, and is disproportionately large for the size of the body; eyes, owl like, excessively large and protruding, of a greenish yellow colour.*]

The Dikkop is very migratory in its habits, and may be found scattered all over South Africa as far up as the Tropic of Capricorn, but not in large quantities in any particular places. It is sometimes met with in small flocks, but usually in pairs, and is very much inclined to frequent broken stoney country sparsely overgrown with vaal bush. When disturbed it runs with considerable rapidity, and, like most of the Bustards, prefers concealment in the bushes to immediate flight. When on the wing the legs are stretched to the full extent backward like the heron, and the flight being slow and regular, it is a very easy bird to shoot. It is supposed to feed only during the night, its food consisting principally of a very small species of black ant; it will, however, also devour locusts with avidity. The flesh is white and very good.

The Natal Dikkop (*Œdicnemus natalensis*).

[*This can be readily distinguished from the last described by its inferior size, proportionately larger bill, and, generally, deeper colour,*

a rather broad edging of slatey brown lining the upper and lower portions of the wing.]

FOUND only in the Eastern districts of the Cape Colony and Natal, and is very rare.*

WILD FOWL.

The Spur-Winged Goose (*Plectropterus gambensis*). Fig. 63, Plate XII.—*Vilde Macauw* of the Dutch; *Peelee Peelee* of the Bechuanas.)

[*Back black, tinged with copper; upper portion of wings dark green, the under portion mottled with white; fore part of head bare of feathers, the skin of which and bill are dark crimson; legs, flesh coloured; chin, lower portion of breast and belly, pure white.*]

THIS very fine bird, which derives its name through being furnished on the shoulders of each wing with a strong sharp spur often considerably exceeding an inch in length, is capable of being domesticated without difficulty, and is the largest of the African Geese.† The reedy margins of Lake 'Ngami and the marshes of the Okavango, Chobe, and Zambesi are its true home, where it breeds in enormous quantities. Half-a-dozen broods were hatched last year in the numerous *vleys* surrounding Vaalpen's Pan, about thirty miles from Mafeking. When the pans and *vleys* are filled with water after periods of heavy rain, they forsake the impenetrable swamps, and generally in couples scatter all over the country, seldom, however, straying so far South as the Orange River, being rarely met with along rapid streams with pebbly bottoms. The broods usually number from eight to twelve, the old birds remaining with their progeny for the remainder of the season following the nesting. They do not feed in the day, but may be then observed at rest on the open water or standing motionless on some dry bank, rocky prominence, or island. When on the wing they continuously utter a low hissing noise, and shortly after sundown, just before darkness sets in, leave their day resorts and fly to the feeding ground, which is generally some very shallow pan or swamp overgrown with grass,

* Another species is said to frequent portions of Mashonaland, known as the Vermiculated Thick-Knee (*Œdicnemus vermiculatus*).

† Specimens have been obtained weighing 15 lbs.

and here they spend the night in search of leeches and water animalculæ. Although the Spur-winged Goose often alights on trees, it does not roost or nest in them, but usually deposits its eggs on some dense reedy island, or under a low bush in the immediate vicinity of water. During the night, and when on the way to and from the feeding places, they fly very close to the ground, at an elevation only sufficiently high to enable them to avoid coming into contact with trees or bushes, and, as a rule, if not disturbed, will nightly take the same line of flight, a circumstance which is often taken advantage of by sportsmen. They are very wary and possessed of great vitality, nothing smaller than buck-shot (except at very close quarters) taking much effect on the leathery skin of the old birds, the flesh of which is exceedingly tough, that, however, of the young ones being tender and deservingly esteemed.*

The Egyptian Goose (*Chenalopex ægyptica*).—(*Berg-ghanse* of the Dutch.)

This Goose has been more or less acclimatised in England, and may be seen on most of the ornamental ponds in the London gardens and parks. Being so well-known in appearance, a description is quite unnecessary. It is the common Wild Goose of the Cape Colony, and may be found in greater or lesser numbers up to the Zambesi, and frequents rapid running streams as well as the *vleys* and pans, being met with either singly or in pairs. Unlike the Spur-winged variety, the moment the young brood is strong on the wing they part company, and go into the world on their own account. It builds its nest indifferently on dry land, or in shallow *vleys* overgrown with long grass, and when on the wing continually utters an exceedingly loud harsh grating note. The flesh is considered better than that of the Spur-wing.

The Dwarf *or* **Pigmy Goose** (*Nettapus aurilius*).

[*Size somewhat the same as the common teal of Europe. Head and portion of back, glossy dark green; upper part of side of neck and portion of cheek, a very brilliant pea geeen; parts of cheek, front of head, throat, and belly, white; chest and portion of back, brownish red.*]

* If the variety known as Rüppel's Goose (*Plectropterus rueppelli*) is really distinct from the Spur-wing, both frequent the 'Ngami and Zambesi cou ntries.

THIS beautiful little goose is stated to be an occasional visitor to some parts of the Cape Colony and Natal, but it is seldom met with in the Transvaal. A pair were shot on the Molopo River, close to Mafeking, three years ago. About Lake 'Ngami* and along the Okavango, Botletle and Zambesi Rivers it is quite common, and is generally found in flocks of about half-a-dozen, frequenting some still and retired nook overhung by trees. The flesh is rather tough and oily.

The Knob-billed *or* **Spur-winged Duck** (*Sarcidiornis africana*). Fig. 64, Plate XII.

[*Specimens have been obtained measuring 27 inches in length. This peculiar species of Duck very much resembles the Spur-winged Goose not alone in colour, but also in the presence of less developed spurs on each wing. The back, however, approaches more to brown than black, the coppery tinge being more distinct, while the wings are of a brighter green; the white of the head and neck spotted distinctly with black; a flat india-rubber-like knob ornamenting the upper mandible of the drakes, and sometimes those of the fully matured ducks.*]

THE Knob-billed Duck is nowhere common, and does not appear to be known South of the Orange River. It is occasionally met with in the Transvaal and Damaraland after heavy rains, but is more plentiful in portions of Matabeleland and in the Lake 'Ngami, Chobe and Zambesi regions. The first place on the Northern road to the Interior in which it has been known to breed and continually frequent is a chain of small, dense, reedy *vleys*, formed by the Taungs River in the Kanya Country, Bechuanaland Protectorate, about ten miles from the Chief Maghosi's town. When observed it is usually in large flocks, often amounting to thirty and forty in number. The manner of flight is in the form of a V, while the slow stroke of the wing, shape of the body, and length of legs and neck, bear a greater resemblance in every way to a Goose than a Duck, for which reason it is commonly, although perhaps erroneously, called the "Knob-billed Goose" by Colonials; and when, in addition, its

* Mr. Nicoll's native servants caught two Geese of this description with a fish net near Moremi's old station at De-nokane, North of Lake 'Ngami, but all efforts to preserve them alive proved fruitless. They have, however, been admirably mounted by Messrs. Rowland Ward.

large size be taken into consideration, such a mistake can reasonably be excused. Generally frequenting secluded *vleys* margined with timber, it is rather a stupid bird and not by any means difficult of approach, particularly when perched on the branches of trees, as, when in this elevated position, it appears to be under the impression that all danger is removed. When a flock is met with in some favourite resort, although it may fly away after being fired at, it will usually return again and again to the same place after short intervals, and affords a sportsman every opportunity of obtaining a large bag. The flesh is delicious, and is said by some who have had an opportunity of judging to rival in flavour the canvas-back duck of North America.

The Black Duck (*Anas sparsa*). Fig. 61, Plate XII.

[*Size considerably larger than the common mallard. General colour, very dark brown, almost black, mottled about the head; wings and tail marked with several distinct white round spots; wings marked with two narrow bars of white and black, followed by a broader one of lustrous green.*]

THIS very shy and now somewhat rare Duck is only found along some of the sluggish rivers of the Cape Colony proper, the Orange Free State, Natal, and occasionally on the Southern borders of the Transvaal. Some ten years since it was not at all uncommon on the Reit and Modder Rivers (tributaries of the Vaal), but always kept concealed during the day under the shade of the karee or willow trees which overhang the banks of these streams. It is not found in Damaraland, Lake 'Ngami, or Okavango regions, but is said to frequent portions of the lower Zambesi. It is always met with in pairs.

The Yellow-necked *or* **White-backed Widgeon** (*Thalassornis leuconota*). Fig. 68, Plate XII.

[*Size somewhat larger and the body more thick set than the common Widgeon of the British Isles. Bill blackish brown, shaped like that of a goose, broader towards the point; head mottled minutely with brown and dirty yellowish spots; neck nearly all round, yellow; feathers of same, and on breast and belly, fluffy and oily looking, like those of a grebe; upper portion of breast mottled;*

Plate XII.

Fig. 60.—The Yellow-billed Teal (*Anas xanthorhyncha*).

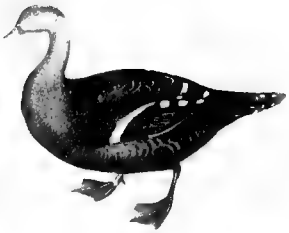

Fig. 61.—The Black Duck (*A. sparsa*).

Fig. 62.—The Crimson-billed Teal (*Pœcilonetta erythorhyncha*).

Fig. 65.—The Hottentot Teal (*Querquedula hottentota*).

Fig. 63.—The Spur-winged Goose (*Plectropterus gambensis*).

Fig. 64.—The Knob-billed Duck (*Sarcidiornis africana*).

Fig. 66.—The Cape Shoveller (*Spatula capensis*).

Fig. 67.—The Maccoa Duck (*Erismatura maccoa*).

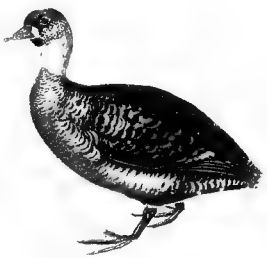

Fig. 68.—The Yellow-necked Widgeon (*Thalassornis leuconota*).

underneath, a uniform dirty light brown, minutely streaked with a darker shade; feathers on back, black, edged with broad lining of yellowish brown; the white of the back imperceptible unless the wings are open; paddles exceedingly large and placed far back; tail, fan-shaped, consisting of about half-a-dozen short and almost bare shafts.]

This nondescript bird has been spoken of as an occasional visitor to some of the *vleys* in the Cape Colony and Natal. In the Transvaal and Bechuanaland it is far more common than is usually supposed, but owing to its habits is not often noticed * It, however, frequents the open waters of Lake 'Ngami simply in thousands. The flesh is rather too oily to be palatable, and will not keep longer than a day in hot weather.

The Maccoa Duck (*Erismatura maccoa*). Fig. 67, Plate XII.

[*Size slightly smaller than the last described. General colour, uniform reddish brown, paleing on the wings and underneath; head black; bill slatey blue, resembling that of the Cape Shoveller* (Spatula capensis) *in shape; tail feathers scarcely more than bare shafts, placed more together, pointed, and less fan-shaped than in the Yellow-throated Widgeon.*]

This Duck is, like the last mentioned, a wonderfully expert diver, and rarely takes to the wing except when migrating from one *vley*

* Mr. Nicolls has shot round the numerous grass *vleys* in the neighbourhood of Vaalpens Pan in the Bechuanaland Protectorate on and off for the past six years, but until last year he was not aware of the existence of this grebe-looking Widgeon in the district, although he has now no doubt whatever that they resort in large numbers to these waters after heavy rains. Colonel Sir Frederick Carrington and other gentlemen from Mafeking have also constantly visited the pans in question, and although they generally procured very large bags of other wild fowl, we are not aware that the species under notice formed any portion of them. Last year we took a canvas boat to the pan above mentioned, and with considerable difficulty forced our way in it through the thick grass towards a small portion of open water in the centre of one of the largest of the *vleys*, killing with the first discharge eight of these birds when sitting. Although probably five or six dozen more were there at the time, the remainder dived, not a single one taking to the wing. After gathering the dead birds, the neighhourhood was searched for a considerable time, but we did not meet with other specimens, nor could we discover any nests, although it was in the time of the breeding season. Mr. Nicolls' experience at Lake 'Ngami has been similar, and although he has shot dozens from a Berthon boat there, he never yet saw one in flight. They always resort to the open water outside the reed beds, and never venture in the shallow spaces next the shores. Mr. Nicolls is certain they are capable of diving fifty or sixty yards.

to another after heavy rains. It may be met with all over South Africa in certain seasons of the year, but is everywhere exceedingly scarce, even in that home of water fowl, Lake 'Ngami.

The Masked Duck (*Dendrocygna viduata*).

[*Same size as the Crimson-billed Teal. Bill black; fore half of head spotless white; back of head and neck black; wings dark brown; the feathers of back a lighter shade, each one being edged with pale yellow; upper portion of breast uniform reddish brown; sides marked with alternate transverse streaks of brown and yellowish white.*]

This pretty Duck is unkown in the Cape Colony, but is said to be an occasional visitor to Natal and the Transvaal. It is often met with on some of the large pans of the Bechuanaland Protectorate, but does not breed there. On the Zambesi, Chobe, Botletle, and Okavango Rivers, and on Lake 'Ngami, it is quite common, and may be seen in flocks up to a hundred flying in the form of a V. At Moremi's old station at the South-eastern corner of Lake 'Ngami they pass up and down in enormous quantities, the flights taking place just at and for a short time after sundown, their approach being heralded with shrill whistles. Like the Knob-billed Duck, this species may be observed perched on trees. The flesh is delicious.

The Crimson-billed Teal (*Pœcilonetta erythrorhyncha*). Fig. 62, Plate XII.—(*Vley Duck* of the Colonists.)

[*Length about 18 inches. Top of head umber brown; cheeks dirty white; outer edges of bill crimson; neck minutely mottled with brown and white; back, shoulders of wings and quills, dark brown, each feather of the back fringed with pale yellowish pink; two bars of pink on the wing, the one broad and the other narrow, divided by a narrow green one; breast and belly brown and dirty white.*]

In Bechuanaland, the Transvaal, Mashonaland, and Damaraland, this Teal is quite the commonest met with, and breeds on almost every favourable pan in these countries, usually preferring those which are shallow and overgrown with grass. It does not appear to breed in the Cape Colony or Natal, but may occasionally be met with after heavy rains. The nests are generally found floating on the water in

the long grass, but sometimes they build under bushes on dry land, but always very close to the water. They go in flocks of about half-a-dozen, and when fired at do not immediately forsake their haunts, but will continue to fly in circles, thus giving many opportunities to the sportsman. They are excellent divers, and being possessed of great vitality, are capable of carrying away a lot of shot. Unless killed outright, it is almost impossible to find them in grass-grown *vleys*, as they will generally lie under water with merely the tip of the bill exposed. Under similar circumstances they have a habit, if not too severely wounded, of forsaking the water and taking refuge in any long grass or bushes which may happen to be near the margin. They inhabit the grass *vleys* throughout Bechuanaland in great numbers, and bags exceeding one hundred have often been obtained in a single day about Vaalpen's Pan.

The Yellow-billed Teal (*Anas xanthorhyncha*). Fig. 60, Plate XII.—(*Gheel-bek* of the Dutch.)

[*Size intermediate between the Black Duck and the Crimson-billed Teal, which latter it much resembles. The general colour is, however, considerably paler, and the feathers are margined with dirty white instead of being pinkish; wings marked with a bright bluish-green broad bar, edged with white; centre of upper bill blackish brown, remaining portion orange yellow.*]

This is the commonest Teal met with in the Cape Colony proper, the Orange Free State, and Southern portion of the Transvaal. Like the Crimson-billed Teal, it frequents rain pools and *vleys* in preference to running water, where it is usually observed in pairs. Its habits are also similar to that species. Further Northward it becomes scarcer, and is only a rare visitor to Lake 'Ngami.

The Cape Teal (*Querquedula capensis*).

[*Size almost the same as the Crimson-billed Teal, and is thus described in Layard and Sharpe's* "Birds of South Africa":—"*Head, ash grey, profusely streaked with blackish dots; lower part of neck and breast ash grey, profusely variegated with reddish brown broken bars, giving the plumage a scaled appearance; feathers of the back, dark reddish brown, each feather edged with lighter; speculum of the wing, bright green, edged with white and black;*

shoulders dark ash; legs reddish; webs dusky; claws black; bill red, the base black."]

This Teal is similar in its habits to the Crimson and Yellow-billed varieties, although it is not by any means so plentiful as either. It is not found in the Interior.

The Hottentot Teal (*Querquedula hottentotta*). Fig. 65, Plate XII.

[*Size about the same as the common teal of the British Islands. Top of head brown; cheeks and chin dirty yellow; breast and belly light reddish brown, the former sparely blotched with umber brown; back, dark brown; the feathers fringed with a paler colour; shoulders of wing dark umber, remaining portion of same dark green, relieved with a white longitudinal streak; quills dark brown.*]

This is the smallest of the Cape wild fowl, but is rather rare, being occasionally met with in the Cape Colony, Natal, and the Transvaal. It has not, to our knowledge, been seen in Bechuanaland or Matabeleland, but at Lake 'Ngami it is fairly common, frequenting the shallows singly or in pairs, but never in flocks. It is exceedingly wary, and flies with great rapidity.

The Cape Shoveller (*Spatula capensis*). Fig. 66, Plate XII.

[*About the same size as the Yellow-billed Teal, and is easily distinguished by the projecting shovel-shape of the upper mandible. Lower portion of head and upper portion of neck, dirty white, minutely mottled with small brownish spots. General colour, dark umber brown, each feather margined with pale buff; shoulders of wings pale blue, followed by a narrow bar of white, and again by a broader one of blackish green; legs and paddles dirty yellow.*]

Although the Shoveller is by no means common anywhere in South Africa, it is perhaps more so in the territories bordering the Orange and Vaal Rivers, as a good many have been exposed for sale from time to time on the Kimberley market. Mr. Andersson mentions its presence in the northern portions of Damaraland.*

* Mr. Nicolls never observed the species at Lake 'Ngami.

The South African Shell Duck (*Casarca cana*).

[*Size about the same as the Knob-billed Duck, and is thus described by Layard and Sharpe* :—"*General colour, rufous, inclining to yellow (fulvous) on the chest and vent, and mottled with minute wavy black lines on the back; rump and lower part of back very dark grey; tail black, shining green; shoulder pure white; green patch on the wing very large; head and neck ash coloured, with a dark rufous collar.*"]

This Duck is very scarce, and does not appear to stray much North of the Orange River. It is unknown in Bechuanaland, Matabeleland, or the Lake 'Ngami regions.

The South African Pochard (*Aythia capensis*).

[*About the same size as the Crimson-billed Teal, and is thus described in Layard and Sharpe's* "Birds of South Africa":—"*General colour above, deep brown, minutely variegated with grey; below deep brown, tinged with rufous, more especially on the flanks and shoulders; lower part of the neck and breast approaching to black, tinged with faintish purple; cheeks and sides of upper part of neck, rich dark chestnut; small spot on the chin and bar on the wing white.*"

The Pochard is an occasional visitor to the Cape Colony and Natal, being, however, more common in the Transvaal and grass *vleys* of Bechuanaland. It is also rather plentiful at Lake 'Ngami.

The Cape Duck (*Pœcilonetta capensis*).

[*About the same size as the Crimson-billed Teal. General colour, uniform mottled very light brown and white; the wings and spots on back a darker shade; head and upper portion of neck minutely mottled; a dark green bar on the wings, enclosed on each side and below with white ones.*]

This Duck is found in the maritime portions of the Cape Colony, but is unknown in the Interior.

SNIPE.

The Black-quilled Snipe (*Gallinago nigripennis*).

["*This fine snipe may be easily distinguished from the common snipe of Europe by the larger size, and by the blackness of the dorsal plumage, as well as by the greater number of tail feathers, which in the last named bird are only fourteen in number.*"—*Layard and Sharpe's* "Birds of South Africa."]

This is the common Snipe of the country, and is met with more plentifully in the Cape Colony and the Transvaal than elsewhere, being only a very rare visitor to Bechuanaland or Damaraland. It frequents in wisps the muddy *vleys*, but is seldom seen along the running streams. It is a very easy bird to shoot, as, on being flushed, it flies straight away, without any twists or turns, its progress at the same time being very slow. In the breeding season it gives vent to the same drumming noise as the European snipe.

The Great Snipe (*Gallinago major*). Fig 47, Frontispiece.

In appearance this bird resembles the last-mentioned in every way, from which, however, it may be distinguished by the pale hue of the cheeks.

The African Painted Snipe (*Rhynchœa capensis*).

[*Size a little larger than the common European snipe. As a rule it may be taken that the males of all birds are more brilliantly marked than the females, but the order of nature is very much reversed in the case of this species, the beautiful metallic lustre permeating the plumage of the latter, and the refulgent green of the wings forming a contrast with the tamer, though scarcely less handsome, colouring of the former. From its appearance the Painted Snipe can so readily be distinguished from its congeners, that a more minute description would be superfluous.*]

Generally met with in pairs, frequenting muddy *vleys* and occasionally the margins of running streams, these birds are distributed all over South Africa, nowhere, however, by any means plentifully, though more common in Damaraland, Ovamboland, and the Western

maritime division of the Cape Colony. Their flight is heavy and slow compared with the common snipe of the British Isles, and when flushed they will only fly a short distance before again returning to the ground. Its flesh is equally delicious with the other varieties.

The Southern Ostrich *(Struthio australis)*.—*Vogelstruis* of the Dutch; *'Nché* of the Bechuanas.

[*Possessed of but two toes, the outer shorter than the inner, the spoor is easily distinguished. The Ostrich of South Africa is recognised as distinct from the North African species, and although they vary very little in plumage, the egg shells of the Cape bird will be found less rough exteriorly.*]

The supposition that there is more than one variety frequenting the Kalahari or Damaraland is now generally considered to be an error As is well known, the Ostrich has been successfully domesticated, and Ostrich farming is carried on not alone in South Africa, but in other parts of the world, the feathers from both the tame and wild birds forming for many years past one of the principal articles of commerce of the Cape Colony. The wild Ostrich is still plentiful in portions of the Kalahari, particularly so in that stretch of country lying about 100 miles Southward of Lake 'Ngami, and on the Eastern confines of Namaqualand and Damaraland. It is also occasionally met with in the Barkly West district. Numerous flocks still roam on the great bare flats around Mababe and the Makari Kari salt pans, while in Matabeleland it is found in favourable localities, where not driven out by explorers. Owing to its great speed—which exceeds that of any of the antelopes—and the difficulty of bringing horses into the waterless tracts which it frequents, at the present day it has become rather difficult to secure specimens. It haunts the bare open flats, or such as are covered with stunted patches of bush, in flocks of from about ten to twenty, and is very often met with in the company of the Zebra and Wildebeest. Being exceptionally keen sighted, stalking generally proves fruitless, and the best (in fact the only) plan to adopt if mounted on coming across a troop is, instead of riding straight at it, to proceed at a wide angle, and as the birds when pursued will invariably start running in a circle, with a decent horse they can be cross-cutted, and several running shots obtained. Of course, the chances are naturally

much improved when several horsemen are engaged in the chase, each, on the occasion, taking a different angle. If these tactics be adopted on a very hot day, it is not unusual for an entire flock to be ridden to a standstill; in cool weather they are capable of running clean away from any ordinary Colonial horse in a stern-on chase. The cock birds when domesticated are exceedingly dangerous to approach, especially in the breeding season, fatalities very often occurring in connection with them, and when bent on attack, they first commence operations by knocking down an intruder with a forward kick, and if not thoroughly satisfied with this feat, they then proceed to execute a series of hornpipes on the generally inanimate body, and as a full-grown Ostrich will weigh between two and three hundred pounds, it may be imagined that individuals so operated upon, have not, as a rule, an opportunity of afterwards relating their experiences. No instances have been recorded in which the wild birds exhibit this vicious disposition. Early in the morning they emit a sound not at all unlike the very much subdued roaring of a Lion, but a very little experience will be sufficient to enable one to be distinguished from the other. It is quite a mistake to suppose that Ostriches exist altogether without water; they will certainly not go very much out of their way to obtain it, but where a ready opportunity is afforded, they drink constantly. Almost every introductory book to natural history deals fully with the habits and peculiarities of these birds, and also of the numerous devices employed by the Bushmen and other natives for their destruction. It is therefore unnecessary to devote more space to them, but anyone anxious for further information will be amply repaid by the perusal of Mr. J. W. Douglas' excellent work on the subject.

FISH.

Some Remarks on the Fish of the Country.

Lovers of sport in the shape of sea fishing will not be disappointed in this respect on visiting South Africa, as the Cape seas actually teem with a truly wonderful variety of the finny tribe, which not only afford excellent diversion in their capture, but also offer a vast field of interest for the observation of the naturalist, as numberless specimens are still nameless and unknown to science. Some idea may be formed of the enormous quantities of fish frequenting these waters when it is quite a common sight to witness tons upon tons stranded after the graving dock at Cape Town has been emptied of water;* and it is literally the truth to say that during certain times of the year it would be difficult to shoot an arrow from some of the landing stages without impaling some sort of fish, but more particularly those of the mackerel tribe. Whatever Cape Town may ultimately become, it is certainly not the liveliest city in the world, and without in the least depreciating its very beautiful surroundings, it is possible for one to tire of visiting the many places of interest in its neighbourhood, and of constantly viewing the stupendous grandeur of Table Mountain and its "table cloth." At such times the monotony of existence may be happily broken by the excellent fishing in the environs; and of the numerous favourable places for the enjoyment of such, none can be recommended so much as around Penguin Island, ten miles out in False Bay, or off the Roman Rocks, near Simonstown. In favourable weather in either of the localities mentioned, monsters—bearing almost every conceivable colour and imaginable shape—may be hauled up with surprising rapidity. Of course, it must be understood that deep-sea lines are alone to be used. Excellent sea-worthy boats may be hired for about twenty-five shillings per diem at Kalk Bay, a station on the Simonstown Railway, about an hour by rail from Cape Town. But

* On February 14, 1889, according to the *Cape Times*, no less than 128 tons of fish were taken from the graving docks.

even without going so far from the Metropolis, Table Bay itself (and particularly towards Robben Island) will furnish the sport, *par excellence*, in the shape of Snook fishing, while immediately round the breakwater the hard-tugging Gheelbeck and other varieties too numerous to mention may be captured. Taking it all round, however, it will be a matter of difficulty to find one place more favourable than another along the entire coast of South Africa for the indulgence of this pastime.

The same remarks are not applicable to the fresh-water fish of the Cape Colony proper, or Natal, and the angler will have little opportunity for displaying his skill with rod or line, as the varieties inhabiting the African rivers are few in number and afford little interest to the sportsman or naturalist. It is to be hoped, however, that matters will now change for the better in this respect, thanks to the enterprise of a few gentlemen who, after going to considerable expense and surmounting numerous difficulties, have, we hope, at length succeeded in introducing trout into some of the streams of the Cape Colony.* There seems to be no reason why the experiments now started in earnest should not have an equally favourable result as in New Zealand, and when such suitable rivers as the Vaal and the Orange are now so easily reached from the coast, ultimate success ought to be assured. The South African climate, at least, should not form any obstacle thereto, but it is feared that any attempts to introduce the salmon would prove a failure, as the natural features of the rivers would generally obstruct the fry from getting to and returning from the sea. However, as these questions have now assumed an aspect of importance, the Colonial Governments should at once strictly enforce the hitherto neglected laws framed against the atrocious practice of killing fish with dynamite. Regardless of any idea of sport, but actuated with the sole intention of making a haul, persons guilty of using this explosive for the moment forget that for every mature fish obtained in this manner, thousands of the smaller fry are destroyed at the same time. Although, as already stated, it is otherwise in the rivers of the extreme South, it will be found (as regards the abundance and

* It has been reported that a trout of 2 lbs. 15 ozs. in weight, 18½ inches in length, and with a girth of 8½ inches, has been creeled in the Mooi River, Natal. If the dimensions are as given, the girth is ridiculously disproportionate to the length, as a trout measuring 18½ inches should weigh at least 6½ lbs. It is probable that the specimen referred to was "spent."

variety of their denizens), that the Zambesi, Botletle, and Okavango Rivers, with their tributaries, and Lake 'Ngami, will favourably compare with the Cape seas, and here also an extensive and unexplored field for the operations of the naturalist still remains practically untouched. Several native tribes in the tropical portions of South Africa—and notably the Makobas and Masieuvias—except in a few solitary cases, are not in possession of horned cattle, their principal means of subsistence mainly depending upon fish, and particularly some descriptions closely allied to the perch. These are captured in enormous quantities when the inundations occur, with a species of net very skilfully made from the fibre of a flagger-looking plant (*Sanseviera lanuginosa*) which grows extensively in the vicinity of the rivers and lakes, the threads from which are almost as fine as silk and as strong as fishing gut. Of course, sport with the rifle and shot-gun will be the most exciting attraction in the Interior, but game is not likely to be always at hand, and even where so the work of slaughter in this direction will pall even on the most ardent sportsman. A day off with the fish will often form a pleasing contrast to the usual routine of life in the wilderness, and no one travelling in the Hinterland should be unprovided with a couple of the strongest jack-rods and a good supply of tackle of a description similar to that used for perch, roach, and other coarse fishing in England, and strong hand-lines and cod-hooks for "Barbers." It would be quite a matter of impossibility to give, within the compass of this volume, a complete list of the South African fish, but mention will be made of some of the best known varieties which are most likely to form an attraction in the way of sport.

FRESH-WATER FISH.

The Cat Fish *(Clarias capensis).—Barbel* or *Barber* of the Cape Colonists.

[*This is a species of the* Seluroids, *and authenticated specimens have been obtained weighing upwards of 70 lbs. The skin devoid of scales, and is similar to that of the eel; head and mouth excessively large, the upper portion of the former flat and composed of a horny rugged shell, resembling in texture that of the gurnard, and sometimes exceeds in weight the remainder of the body; eyes very small, placed close to the corners of the mouth, the latter of which are merely bony excresences; upper and lower lips furnished with long*

barbels or feelers; back, dark umber brown; belly, pinkish yellow, those found in Lake 'Ngami being of a more reddish colour. In appearance it might fairly be said to resemble a cross between an eel and a gigantic tadpole, if such a monstrosity could possibly be in existence.]

THE "Barber" is the commonest of the South African fresh water fish, and may be found in almost every river and dam throughout the country. The waters of Lake 'Ngami, the Botletle,* Limpopo, and Zambesi Rivers are actually alive with them, and they there form the ordinary food of the Crocodile.† It is a strange but at the same time a well authenticated fact that some of the *vleys* inhabited by these fish, which were full of water during the summer, and to which there is no possible inlet or outlet, although, perhaps, absolutely dry during the entire winter, are again restocked with them in equal quantities when they become refilled. From this it would appear almost certain that they remain without any moisture whatever during the intervening months encased in the sun-baked mud of about the same consistency as concrete. The Boers account for this by saying that the fish store a sufficient quantity of water in their enormous heads to last them until the summer rains release them from captivity! Possessed of the keenest of appetites, they feed at all hours of the day and night in the summer-time, but bite most ravenously early in the morning and late in the evening, taking almost any sort of bait, from a lump of blue mottled soap down to a piece of the flesh of their own species, but at all times they have a strong fancy for the entrails of Guinea Fowls and Francolins. As no angling skill whatever is necessary, a strong hand line and cod hook will be found sufficient to all intents and purposes for their capture. It is merely a waste of material to use a lighter line, as, when hooked,

* Messrs. Nicolls and Hicks, when fishing one day on the Botletle River with two hand lines, in the space of an hour and a half landed twenty-two of these fish, none of which were under ten or over twenty pounds in weight; and Mr. Eglington, in the company of two others, and using a similar line, has caught in the Notwani River an even greater number in an equally short period, although the majority were much smaller, the largest turning the scale at twenty-seven pounds.

† For the capture of the Crocodile, a peculiar description of triangular harpoon-shaped hook is manufactured, the line to which it is attached consisting of cable wire nearly half an inch in thickness, which should be fastened to a stout but yielding branch overhanging a pool frequented by the saurians. The liver of an ox is the best bait that can be used, and this should be allowed to dangle just over the water without touching it.

the first rush is for the weeds, in which, if they they once become entangled, it will be found almost impossible to clear them. As they do not possess air cells, when killed with an explosion of dynamite they will not float on the surface like other fish, but remain at the bottom, their necks being invariably broken by the force of the concussion. When caught under one pound in weight they are very good eating, but those much exceeding that size are excessively coarse.

The Yellow Fish (*Barbus capensis*).—*Gheel Fisch* of the Boers.

[*Specimens have been taken weighing over 20 lbs., but the average run is between 2 and 3 lbs. In shape it is not unlike the common dace, but the body is more elongated and slender in proportion. Colour of back, pale greenish brown; remaining portions golden yellow, tinged throughout with green; scales very large.*]

This fish is common in the Orange, Vaal, Reit, and Modder Rivers, and may be found in almost every stream in the South, affording very fair sport with rod and line. In the Crocodile and its tributaries it becomes rather scarce, and never attains any large size, while it is unknown in the rivers within the Tropics. Between daylight and nine o'clock in the morning, and for an hour before sunset, it is on the feed, rarely taking a bait during the extreme heat of the day, and will usually be found frequenting the deep eddies on the edge of rapid running water. Ordinary perch tackle will be found sufficient, using a float and fishing as near to the bottom as possible without letting the bait actually rest stationary on it. It will take worms and locusts well, but when these are unobtainable, the entrails of small birds may be used with effect. When caught weighing upwards of two or three pounds, although bony, they are very fair eating, but when smaller they are almost useless. To cook, scrape off all the scales, tightly tie the fish in a cloth, and boil in water containing plenty of salt. They are not at all nice when fried.

The Mud Fish (*Ambrostomus capensis*).—*Modder Fisch* of the Dutch.

[*Seldom exceeds 2 lbs. in weight. Back, brownish purple, with green tinge; belly, yellowish white. Can readily be distinguished*

by its pulpy-looking mouth, which is pointed downwards, the lower lip projecting inwards; scales very small.]

THE Mud fish is very common in the sluggish rivers of the Cape Colony and the Southern portions of the Transvaal and Bechuanaland which have muddy bottoms. Feeding only on minute insects, no instance has been recorded in which the species has been captured with baited hooks, although thousands annually fall victims to the *dynamitard*. For culinary purposes it is absolutely useless, although the Boers, when opportunity occurs, preserve large quantities by salting and drying.

The Silver Fish.

[*May be caught up to 3 lbs. in weight, and in shape resembles the Yellow Fish. The colour is a bluish silver grey, with a pinkish tinge.*]

THIS fish is not met with in the rivers North of the Crocodile, and as an object from which sport can be derived, it deserves no special mention. It is not good eating.

The Burrowing Perch *or* Culper (probably closely allied to *Tilapia sparrmanti*).

THE "Culper" in appearance resembles the *Anabas* or climbing perch, and is not to be found in the rivers of the Cape Colony, being first met with in the Marico and Crocodile Rivers, where it seldom exceeds half-a-pound in weight. In the Botletle, Zambesi, and other rivers within the Tropics, it attains a weight of over two pounds and is quite common, while Lake 'Ngami swarms with the species, which forms the staple article of food of the Makobas and Masieuvia tribes of the Interior. It will generally be found in the still pools on the edge of rapid-running water, and when the rivers have overflowed, resorts to the inundated flats, where it excavates holes in the alluvial soil, presumably for the purpose of depositing the spawn. Without attempting to further explain the reason for these excavations, the burrows, as they may well be termed, generally represent five round funnels three or four inches in diameter, placed in a circle surrounding a centre one of considerably larger dimensions, all sunk to a depth of from one to two feet in the ground, and leading into each other at the base. When the rivers have retired into their natural

beds, these receptacles retain a certain amount of moisture during the dry period, and are packed so closely together that it would be difficult to ride a horse across the flats without sinking into them at almost every step. Although the ordinary food of this fish consists almost altogether of soft grasses and aquatic vegetation, they will bite freely at grasshoppers, worms, and the larvæ of bees and hornets. Like the common perch, they proceed in shoals, and as their appetites are delicate and capricious, light tackle should alone be used for their capture. During some hours of the day they feed on the bottom, and at others closer to the surface of the water, in consequence of which the depth of the sink should be constantly changed, until a favourable result is obtained. Besides netting enormous quantities of these fish, the natives also kill them by setting most ingeniously-contrived traps (made from dry reeds and papyrus) between the deep bed of the river and the shallow water of the inundated lands. The Culper is exceedingly good eating, and comes in quite as a luxury to anyone who has been subsisting for a length of time on venison.

In addition to the above, there are two other varieties of the Perch tribe inhabiting the Zambesi, Botletle, and Okavango Rivers. One is an extremely fine fish, very much resembling the American fresh-water bass, and the colour of which is golden green indistinctly marked with transverse bands of a darker shade. It has been caught with ordinary hand lines baited with the entrails of Guinea Fowl, some specimens weighing up to four and five pounds, and is very fine eating. It frequents deep, rapid-running water, and when hooked with a rod and line gives excellent play.

The other is a smaller variety, which scarcely exceeds seven or eight inches in length, and it can be distinguished by the peculiarity of the mouth, which is large and capable of being extended forward to a considerable distance. It will be found in shallow rapid running portions of rivers which have rocky bottoms. It is the only species of African fresh-water fish that has been caught with an artificial fly.

The Pike-like Fish (*Sarcodaces odoë*—family of *Characinidæ:* Günther.)

This paradoxical fish is uncommonly like the Pike in shape and colour. Its formidable teeth are, however, unretractile, the two lower fangs, so to speak, fitting into the cavity of the nostrils; and

when the mouth is closed, the points of the same project slightly above the snout.* If reliance can be placed on native report, it attains a very large size, but we have never succeeded in capturing a specimen exceeding three pounds in weight. This fish frequents deep water on the verge of the reeds, and affords good sport; and it may be captured with live or any sort of spinning bait. We have usually obtained it when trolling from a Berthon boat and using gimp tackle. It is indifferent eating, but the natives relish it very much.

The Squeaker.

[*Has not been caught exceeding 12 inches in length. The body narrow and elongated; scaleless; bright silver in colour, and semi-transparent like a whiting with the skin removed. It may be distinguished by the pectoral fins being furnished with very sharp spines, which inflict wounds most difficult to heal.*]

This fish is common in the Crocodile and Marico Rivers and some of the streams in the Northern portions of the Transvaal, frequenting the still eddies of rapid sharps with rocky bottoms, and takes grasshoppers and worms well. Only very light tackle should be used. It is without exception one of the most delicious of all fresh-water fish.

There is another description closely allied to the above called the "Tiger Squeaker," on account of its being marked in a manner similar to the loach. It feeds entirely on the bottom, and the flesh is oily.

The Botletle and Zambesi Rivers furnish another variety of an excessively predatory and very beautiful fish, the name of which is unknown. Those which have been caught weighed from three to six pounds, and may be distinguished by the teeth, which are closely set, and projecting beyond the mouth, present a terrific array. The colour all over is bright silver, spotted somewhat like a trout, a broad, well-defined violet stripe extending along the entire body. This fish takes live or spinning bait well, and when fishing for the same, very strong gimp traces should alone be used.

* A specimen of this fish, caught in the Botletle River by Mr. Nicolls, is at present in the British Museum, South Kensington. That eminent authority, Dr. A. Günther, declares it not to be a species of the Pike tribe. In addition to the localities mentioned, it is also met with in other rivers of West-central Africa.

SALT-WATER FISH.

The Snook (*Thrysistes atum*).

[*Average weight about 8 lbs., resembling in appearance the mackerel, its girth, however, being disproportionally small in comparison to its length. General colour, dull silver, approaching bluish black along the back; scaleless; mouth furnished with formidable teeth.*]

This is the commonest and best known of the Cape salt-water fish, and (particularly at certain periods of the year) throngs the waters of Table Bay, but it may be found everywhere in the Cape seas, where it is captured in enormous quantities by the Malay fishermen. When salted and dried it forms a large item in the export trade of the Colony, and in this respect may be said to take the place of the ling in the Southern seas. It is an exceedingly game fish, and when hooked with the rod and line plays with great determination, springing repeatedly out of the water, and equalling the salmon in its rushes, only giving in after making an exceedingly hard fight. The tackle generally employed for the capture of the Snook by the Malays* is a strong hand line, the hook being baited with an oblong piece of shark skin about three inches in length, and trolled behind a boat which is rowed at a sharp pace. A rather large-sized spoon bait, with swivel and gimp tracing, will be found more deadly. As contact with their poisonous teeth is dangerous, they should be killed by blows from a stick before being drawn into the boat.

The following is a list of some of the fish most frequently met with in the Cape Seas. They will take almost any sort of bait :—

The Steen Brass (*Dentex rupestris*).

[*Some have been caught weighing up to 70 lbs. General colour, variegated, clouded irregularly with ultramarine blue, oil green, and lavender purple; profile of head, irregular; a large bulge over the eyes.*]

* The Malays steep their lines in the blood of the ox, which is an excellent way of rendering them waterproof for a time. The same method might safely be tried with salmon and trout lines, in preference to many of the more complicated and perhaps less effective *formulæ* used in England for such purposes.

The Hottentot Fish (*Sargus hottentotus*).

[*Average weight, 3 or 4 lbs. Colour, silverish grey, distinguished by five vertical broad greenish black bands on each side.*]

The Kabbelgaauw (*Sciœna hololepidota*).

[*Attains a length of 3 feet. Colour, intensely variegated with purple, green, blue, and yellow.*]

The Cape Salmon *or* **Gheelbeek** (*Otolithus œquidens*).

[*Attains to 40 and 50 lbs. in weight. Colour, silvered green, with strong yellowish tinge; lips and interior of mouth, orange Flesh coarse, but makes excellent pickle.*]

The Elf Fish (*Lechia amia*).

[*Average weight, 7 or 8 lbs. Shape and appearance very much like a salmon. Colour, bright silverish throughout, darker on the back. Excellent eating.*]

The Roman Fish (of the family of *Sparoids*).

[*Have been caught up to 15 and 20 lbs. Colour, reddish gold. Common in False Bay. A great luxury for the table.*]

The King *and* **Lesser Klip Fish.**

MAY be caught in quantities from off the shore, and frequent rocks overgrown with weeds. Both varieties, although small in size, are considered the greatest delicacy obtainable in the Cape Seas. The flesh of the Creef or Cray fish is generally used as bait for them.

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"My Personal Experiences in Equatorial Africa,"

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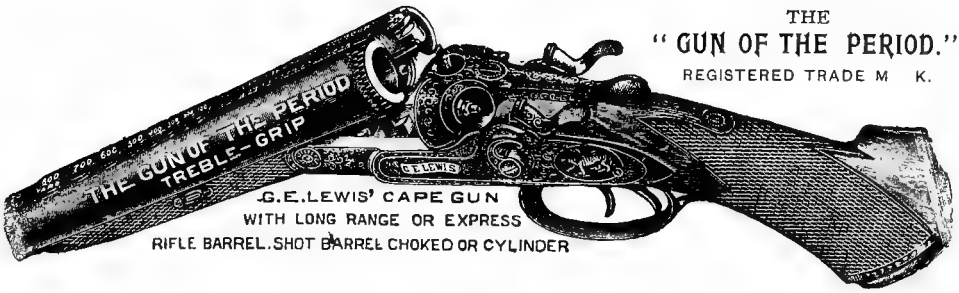

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